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ABSTRACT

This is the second report on the school achievement of children 6-11 years old in the noninstitutionalized population of the United States as estimated from the Reading and Arithmetic subtest data of the Wide Range Achievement Test (WRAT) obtained in the Health Examination Survey of 1963-65. It contains findings by selected demographic and socioeconomic variables. Three different survey programs are utilized in the National Health Survey. The report contains findings from the Reading and Arithmetic subtests of the WRAT by age, sex, race, region, size of place of residence and population change from 1950 to 1960, family income, education of parent, and grade in school. These findings are shown in terms of raw scores, standard scores, and grade equivalents. A battery of tests, designed to assess some aspects of mental growth and behavioral development, was included as part of the standardized examination. Significant differentials in school achievement were found over all variables which were considered. (Author/WS)

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VITAL and HEALTH STATISTICS

DATA FROM THE NATIONAL HEALTH SURVEY

Series 11 - Number 110

NCHS NATIONAL CENTER FOR HEALTH STATISTICS

Intellectual Development of Children

By Demographic and Socioeconomic Factors

United States

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Series 11 reports present findings from the National Health Examination Survey, which obtains data through direct examination, tests, and measurements of samples of the U.S. population. Reports 1 through 37 relate to the adult program; additional reports concerning this program are forthcoming and will be numbered consecutively. The present report is one of a number of reports of findings from the children and youth programs, Cycles II and III of the Health Examination Survey. These reports, emanating from the same survey mechanism, are being published in Series 11 but are numbered consecutively beginning with 101. It is hoped this will guide users to the data in which they are interested.

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Data from the
NATIONAL HEALTH SURVEY

Series 11
Number 110

Intellectual Development of Children

By Demographic and Socioeconomic Factors

United States

Findings from the Vocabulary and Block Design subtests of the Wechsler Intelligence Scale for Children, by age, sex, race, region, size of place of residence, population change from 1950 to 1960, family income, education of parent, and grade in school, shown in terms of raw scores and standard scores or deviation quotients (IQ's).

DHEW Publication No. (HSM) 72-1012

U.S. DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE
Public Health Service

Health Services and Mental Health Administration
National Center for Health Statistics
Rockville, Md. December 1971

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COOPERATION OF THE BUREAU OF THE CENSUS

In accordance with specifications established by the National Health Survey, the Bureau of the Census, under a contractual agreement, participated in the design and selection of the sample, and carried out the first stage of the field interviewing and certain parts of the statistical processing.

Vital and Health Statistics-Series 11-No. 110

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INTELLECTUAL DEVELOPMENT OF CHILDREN
BY DEMOGRAPHIC AND SOCIOECONOMIC FACTORS

Jean Roberts, *Division of Health Examination Statistics*

INTRODUCTION

This is the second report on intellectual development of children 6-11 years of age in the noninstitutionalized population of the United States as estimated from the Vocabulary and Block Design Subtest data of the Wechsler Intelligence Scale for Children (WISC) obtained in the Health Examination Survey of 1963-65. It contains findings by selected demographic and socioeconomic variables.

The Health Examination Survey is a major program of the National Center for Health Statistics which was established to carry out the National Health Survey Act of 1956 enacted by the 84th Congress to provide for a continuing assessment of the health status of the population.

Three different survey programs are utilized in the National Health Survey.[1] The Health Interview Survey, which collects health information from samples of people by household interview, is concerned primarily with the impact of known illness and disability within various population groups. The Health Resources program obtains health data as well as health resource and utilization information through surveys of hospitals, nursing homes and other resident institutions, and the entire range of personnel in the health occupations. The Health Examination Survey, from which data in this report were obtained, collects health data by direct physical examination, tests, and measurements performed on samples of the population. This latter program provides the best way of obtaining actual diagnostic data on the prevalence of certain medically defined illnesses. It is the only way to secure information on unrecognized and undiagnosed conditions and on a variety of physical, physiological, and psychological measures within the population under study to which the examination findings may be related.

For convenience, the Health Examination Survey is conducted as a series of separate programs or cycles each of which is limited to some specific segment of the population of this country and to specified aspects of health. In the first cycle, data were obtained on the prevalence of certain chronic diseases and on the distribution of various measurements and other physical and physiological characteristics in a defined adult population as previously described.[2,3]

In the second cycle, on which this report is based, a probability sample of the nation's noninstitutionalized children 6-11 years of age was selected and examined. The examination, which focused primarily on health factors related to growth and development, included an examination by a pediatrician, assisted by a nurse; an examination by a dentist; tests administered by a psychologist; and a variety of tests and measurements by specially trained technicians. The survey plan, sample design, examination content, and operation of this second cycle of this survey program have been described previously.[4]

Field collection operations for this cycle started in July 1963 and were completed in December 1965. There were 7,119 children or 96 percent examined out of the total probability sample of 7,417 children selected. The examinees, as well as the total sample, were closely

representative of the roughly 24 million noninstitutionalized children 6-11 years of age in the United States.[4]

During his single visit, each child was given a standardized examination by the examining team in the mobile units especially designed for use in the survey. Prior to the examination, demographic and socioeconomic data on household members as well as medical history, behavioral, and related data on the child to be examined were obtained from one of his parents. Ancillary data for the child on grade placement, teacher's ratings of his behavior and adjustment, and health problems known to the teacher were requested from the school. Birth certificates were also obtained to verify the child's age and information relating to him at birth.

Statistical notes on survey design, reliability of the data, and sampling and measurement error are shown in appendix I. Definitions of the demographic and socioeconomic variables included in the report are contained in appendix II.

THE TEST

Included as part of the standardized examination was a battery of tests designed to assess some aspects of mental growth and behavioral development of children. A constraint placed on selection of the battery of tests was that it could be administered adequately within the space of one hour. The battery selected consisted of verbal and nonverbal tests of or related to intelligence as well as other tests designed to assess various personality factors. The specific measures for the estimation of intelligence consisted of the Wechsler Intelligence Scale for Children and the Draw-a-Person Test. For the assessment of personality factors, five cards of the Thematic Apperception Test were used. School achievement estimates in the basic skills of reading and arithmetic computation were obtained with these two subtests of the Wide Range Achievement Test. These tests were included to make possible the assessment of their relation to various findings on the health examination, such as visual acuity and hearing levels, as well as the relationship among measures of intellectual status, school achievement, physical growth and development, and the social and emotional adjustment of the child. All testing was done by psychologists who had been trained at least at the level of the Master's degree and who had previous experience in administering tests to children.

A previous contract report by Sells[5] contains a comprehensive evaluation of the psychological test battery as used in this cycle of examinations. The rationale for including a psychological component and selecting the specific tests used in the Health Examination Survey, that was designed to assess the growth and development of children, is stated in the program description report for this cycle.[4]

The findings in the present report are based on the Vocabulary and Block Design subtests of the WISC. These two subtests, as indicated previously, were selected from the Verbal and Performance test groups, respectively, of the WISC since previous studies have indicated that they are at least as good as any two of the 12 subtests from the WISC in estimating Full Scale intelligence scores on that test.[6]

A more thorough evaluation of the adequacy of these two subtests in the estimation of Full Scale IQ from the WISC for children 6-11 years of age from various socioeconomic levels and ethnic groups was made by Dr. Jane Mercer of the University of California and the California State Department of Mental Hygiene under contract with the National Center for Health Statistics.[7] Findings from this study among 1,310 children attending public elementary schools in Riverside, California, in 1967-1968 showed that the dyad of subtests used in the national survey produced better or at least as good predictions of Full Scale IQ as any other dyad of the WISC across all three ethnic groups in the Riverside sample—the English-speaking Caucasians, the Mexican-Americans, and the Negroes. The correlation of Full Scale with the Vocabulary-Block Design dyad determined either as a multiple correlation from the two subtests or as a simple correlation with the sum of the (scaled) scores from the two subtests was +0.88.

The two subtests of the WISC were administered in the Health Examination Survey in accordance with procedures specified in the WISC Manual,[8] except that each child was started with the first word in the Vocabulary Test. More detailed

information on the field procedures used in administering the tests and the quality control measures used to ensure uniformity and precision have been described previously. [6]

FINDINGS

The first report on intellectual development of noninstitutionalized American children aged 6-11 years based on data from the Health Examination Survey of 1963-65 [7] showed that mean raw scores increased steadily with age on both the Vocabulary and Block Design subtests of the WISC. On the Vocabulary subtest there was a two-fold increase from 16.4 points at age 6 to 34.9 at age 11 out of the total possible score of 80 points. Mean raw scores on the Block Design more than trebled in that span, ranging from 5.7 at age 6 to 21.2 points at age 11 out of the possible 55. The variation in scores for these children also increased with age, somewhat faster on the Block Design than the Vocabulary subtest. The relative variability, in relation to the mean, is about twice as large on the Block Design as the Vocabulary subtest. On both tests the relative variability decreases with age, but at a somewhat slower rate in the latter.

Intellectual development findings from this short form of the WISC are analyzed in this report in relation to region, race, size of place of residence, population change in size of place of residence from 1950 to 1960, grade placement of the child in school, education of the parent who was considered head of the household, and annual family income. In those instances where the sample size was sufficiently large, findings are also given by race and region for each of the other variables. The number of children aged 6-11 years within these subgroups is shown in table 1, and the number of examinees in table I, appendix I. While findings in further detail by income, education, and race (for example) are also of interest here, the sample of examinees was not large enough to provide reliable estimates of mean scores throughout, even for the total age group 6-11 years, and were substantially more unstable or erratic by age. Hence, in lieu of this, multiple regression methods have been used to determine roughly the overall degree of interrelationship of these various demographic and socioeconomic factors with IQ, as measured here.

Findings are discussed first in terms of raw scores obtained on each of the two WISC subtests used here as estimates of the verbal and performance aspects of intellectual development, then in the form of scaled scores on each subtest derived directly from the distribution of raw scores obtained in this study, and finally in the form of deviation IQ's based on the sum of these two scaled scores which gives an overall estimate of intellectual development.

The scaled score values in this report for each subtest have been derived as described previously [6] by a transformation in which the mean of the raw scores for children in this study at each age has been equated to 10 and the standard deviation to 3, thus compensating for the difference in length of the two subtests and facilitating the comparison of relative standing of children within each subtest. For the deviation IQ's, the scaled score equivalents of the raw scores for each child on the two subtests have been added and the resultant combined distributions rescaled with mean set at 100 and the standard deviation at 15. These deviation IQ's are of the order of magnitude of the older form of intelligence quotient which was the ratio of mental age to chronological age. However, they make possible the comparison of an individual with others of different ages, since the deviation IQ is a measure which theoretically would remain invariant with age on retest for a particular child unless his actual test performance as compared with his peers changes.

Region

Intellectual development of children, as rated by either subtest of the WISC used here, was lower among children in the South than among those in the other three regions of the country (table 2 and figure 1). The mean raw scores for Southern children were 3 to 4 points lower on both the Vocabulary and Block Design, differences which were statistically significant at the five percent level. On the average, children in the other three regions (Northeast, Midwest, and West) performed at about the same level on the

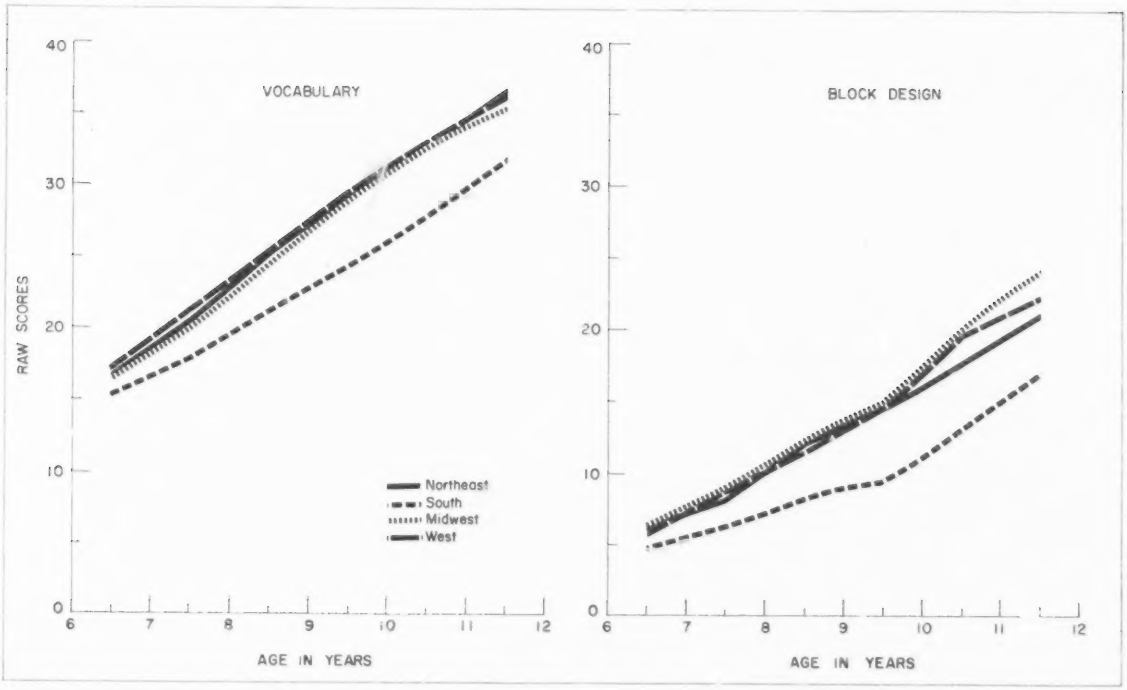

Figure 1. Average Vocabulary and Block Design raw scores on the Wechsler Intelligence Scale for Children by age and region.

Vocabulary subtest, while on the Block Design subtest those from the Midwest scored significantly higher (1.6 points) than their counterparts from the Northeast and slightly higher (1.1 points) than those in the West.

Variability in Vocabulary raw scores, whether considered on an absolute basis or relative to the size of the mean, was somewhat lower in the Midwest than elsewhere. On the Block Design, absolute variability in raw scores was largest in the Midwest, where the mean scores were also highest, but the relative variability in relation to the mean was lower there than in the other areas.

Throughout the age range tested in this survey, children from the South rated lower than those from other regions of the country. The mean differences increase with age from 1 to 2 points at age 6 years on both subtests to 3 to 5 points on the Vocabulary and 4 to 7 points on the Block Design at age 11. These differences are roughly the equivalent of one-third a standard deviation or more and are large enough to be statistically significant from age 7 years on. This general pattern was found consistently among both boys and girls except that at age 7 years only the differences between those from the South and those from the region with the highest average scores—West on Vocabulary and Midwest on Block Design—were statistically significant.

With few exceptions in each of the four regions boys tended to obtain slightly higher raw scores, on the average 1 to 2 points more, than girls on both subtests, though the mean differences were not large enough to be considered statistically significant with the size and design of the sample used here. Exceptions to this general pattern were found at only five points--age 6 years in the Midwest on both Vocabulary and Block Design; and 6 and 8 years in the South and 10 years in the West on Block Design. In these instances only, girls rated as high or slightly higher than boys of the same age, on the average.

When these raw score means are converted to scaled scores (based on the distribution of raw scores from this study with mean of 10 and standard deviation of 3 at each 4-months of age) these same consistent patterns of regional and sex differences on each of the two subtests throughout the age range may be seen even more clearly (table 3).

Intellectual development, in terms of the mean deviation IQ's derived from the scaled scores of both subtests, shows the same consistent pattern of regional differences as that found in the raw and scaled scores for each subtest. Southern children--boys and girls--rate significantly lower, on the average, than their counterparts from other parts of the country throughout the 6-11 year age range (table 3). No age-related trend in the regional pattern of mean IQ is evident here. Boys were found to rate higher than girls on the average in each of the four regions. The differences, however, were generally not large enough to be statistically significant.

Race

White children consistently scored higher than Negro children on the average in both the verbal and performance aspects of intellectual development as determined here by the Vocabulary and Block Design subtests of the WISC (table 4 and figure 2). The mean differences in raw scores increase slowly with age—from 4 points on Vocabulary and 3 points on Block Design at age 6 to 9 points on Vocabulary and 11 points on Block Design at age 11 years—and are statistically significant throughout the age range. These differences are roughly the equivalent of one standard deviation or slightly more on both subtests.

Children of other races—American Indians, Orientals, and others--show slightly, but not sig-

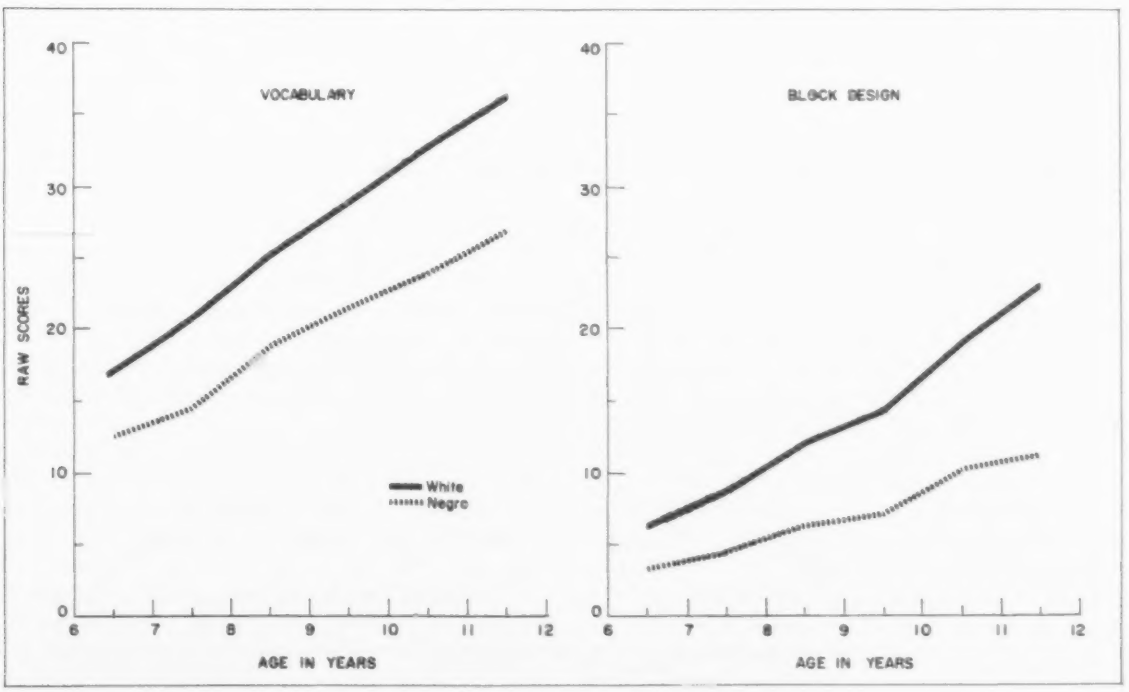

Figure 2. Average Vocabulary and Block Design raw scores on the Wechsler Intelligence Scale for white and Negro children by age.

nificantly, higher average raw scores than white children. However, the number of children of other races in the population, and hence in the sample, is too small (less than 2 percent) to give reliable estimates of intellectual development for this heterogeneous group.

Absolute variability in raw scores, as measured by the standard deviation, on each subtest increases with age for both white and Negro children, more rapidly on the Block Design than the Vocabulary subtest. Negro children show less variability in scores on both subtests than do white children but the discrepancy is substantially larger on the performance subtest. When considered in relation to the size of the mean scores, the relative variability in scores for Negro children exceeds that for white children except at age 8 years, where on Vocabulary the difference is negligible and on the Block Design reversed.

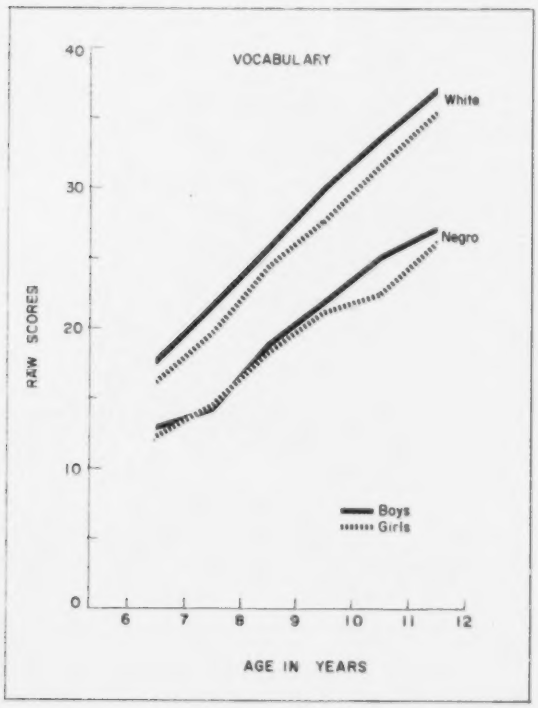

Figure 3. Average Vocabulary raw scores on the Wechsler Intelligence Scale for white and Negro boys and girls by age.

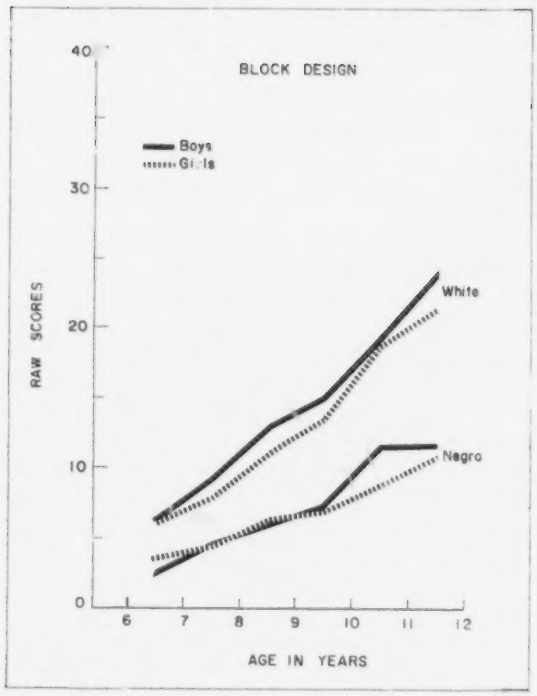

Figure 4. Average Block Design raw scores on the Wechsler Intelligence Scale for white and Negro boys and girls by age.

Both Negro and white boys slightly outscore girls of their own race at each year of age on each of the subtests, except for the negligible reversal among Negro children at 7 years on Vocabulary and 6 and 8 years on Block Design (figures 3 and 4).

Average deviation IQ's and the separate scaled scores for each of the two subtes s show that this Negro-white differential is maintained consistently throughout the age range in the study (table 5).

White children from the South score lower on the average than those from other regions of the country on each of the subtests (tables 6 and 7). The differences are large enough to be statistically significant for the entire group of boys and girls but not at the single years of age. The one exception to this general pattern may be seen for 6 year old boys from the South who rate

just slightly but not significantly above those from the Midwest on Vocabulary.

Negro children from the South also tend to do less well on these tests than those living in other regions though the differences here are in general negligible and the regional pattern by age less consistent than for white children. Thus the generally poorer performance of Southern children on these tests is attributable only in part to this racial differential although the proportion of Negro children in the South is about twice as high as in the remainder of the country.

In each of the four regions of the country, white children rated higher, on the average, than Negro children in both verbal and performance skills, as measured here, throughout the age range for both boys and girls. The mean differences were large enough to be statistically significant in all areas but the West, where the proportion of Negro children was too small to give as stable estimates for them as for the others.

Average deviation IQ values (table 8) show that this same distinct pattern of racial-regional differences is maintained with only minor deviations over the entire age range in this study.

Size of Place of Residence

Children living in urban communities, when not differentiated by size of place, tended to score slightly but not significantly higher on both tests of intellectual development used here than did children in rural areas. This slight differential was maintained throughout the age range for boys and girls on the Vocabulary subtest but with less consistency on the Block Design, where reversals may be noted at age 8 for boys and girls and at age 11 for boys (tables 9 and 10).

Intellectual development ratings did not vary consistently (linearly) with size of place of residence for urban dwellers though some distinct differences by size of place may be seen (figure 5). Those from urbanized areas of 1-2.9 million showed the highest mean scores on both subtests for boys and girls, while those from the smallest of the urbanized communities —under 250,000—rated lowest, the differences between these extremes being statistically significant only for the total group aged 6-11 years.

Children from the large urbanized communities of 1-2.9 million population obtained significantly higher scores, on the average, throughout the age range than did those from rural areas or from other sizable urban areas which did less well than the rural residents. Differences among other urban groups was too small to be of significance.

Boys generally rated slightly higher than girls on both subtests in urban and rural areas though the mean differences were generally not large enough to be statistically significant and the pattern was not completely consistent throughout the age range.

Both white and Negro children in urban communities not differentiated by size rated slightly not significantly higher on both subtests (figure 6) than did those from rural areas throughout the age range in this study (tables 11 and 12).

Within each of the various size urban places and rural areas, white children tend to outscore Negro children on both subtests of the WISC, the mean differences being large enough to be statistically significant here except for the small group living in urban communities of 10,000-24,999.

Total urban-rural differences in intellectual development found for the country as a whole were not maintained throughout the four regions. In both the Northeast and Midwest average scores on both subtests were slightly but not significantly higher for those in rural areas than in all urban communities combined while the reverse but equally indistinct pattern was found in the South and West (tables 13-16).

The general stability over the age range of the slight urban-rural differences in intellectual development ratings in terms of deviation IQ's may be seen in tables 17-19.

Population Change

One index to the economic stability of the communities in which these children reside is the extent and direction of change from 1950 to 1960 in the size of the population within these various areas. Places in which there is an above-average gain during the decade are more likely to have a healthy expanding economy, while those experiencing a loss would tend to be

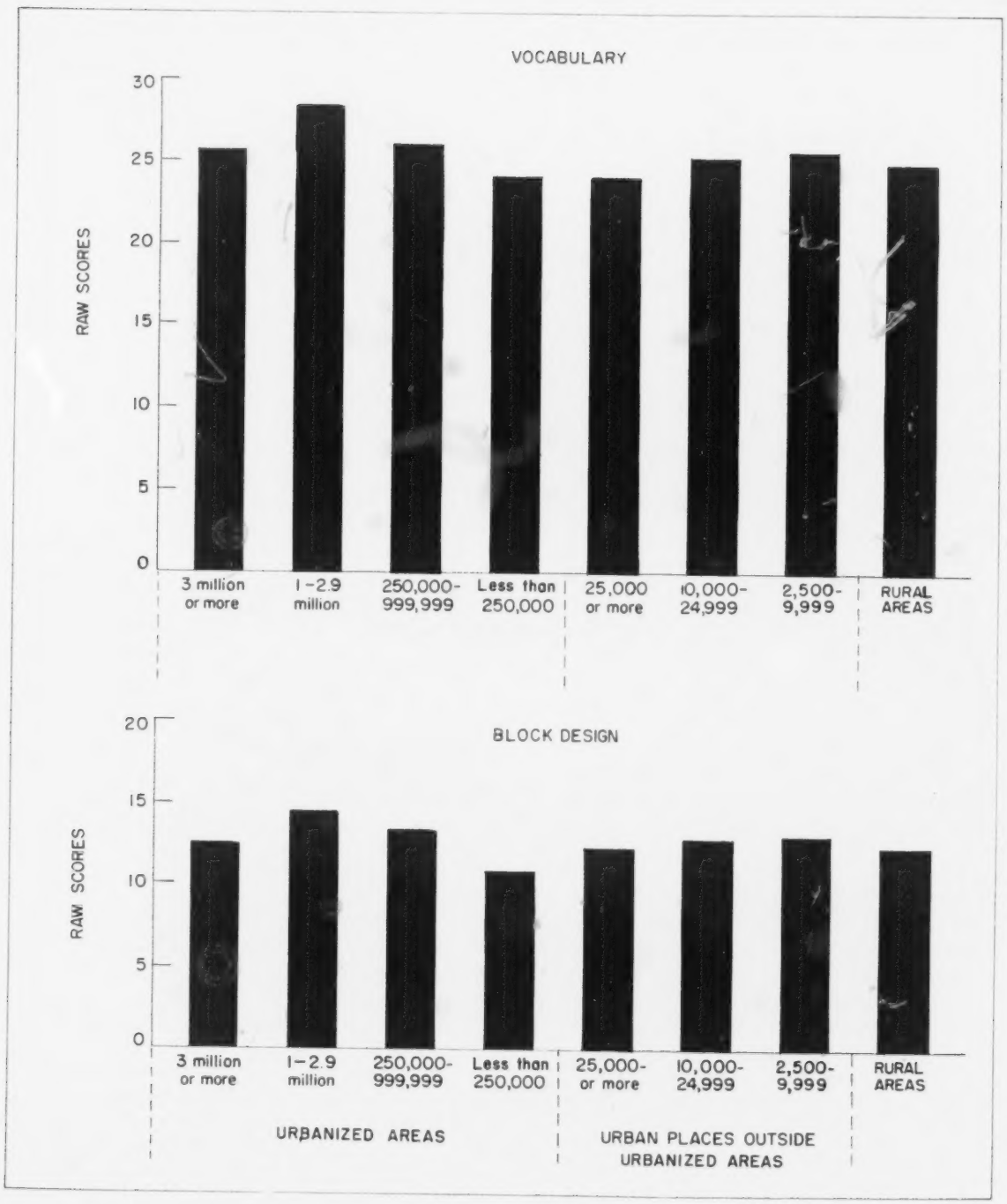

Figure 5. Average Vocabulary and Block Design raw scores on the Wechsler Intelligence Scale for Children by size of place of residence.

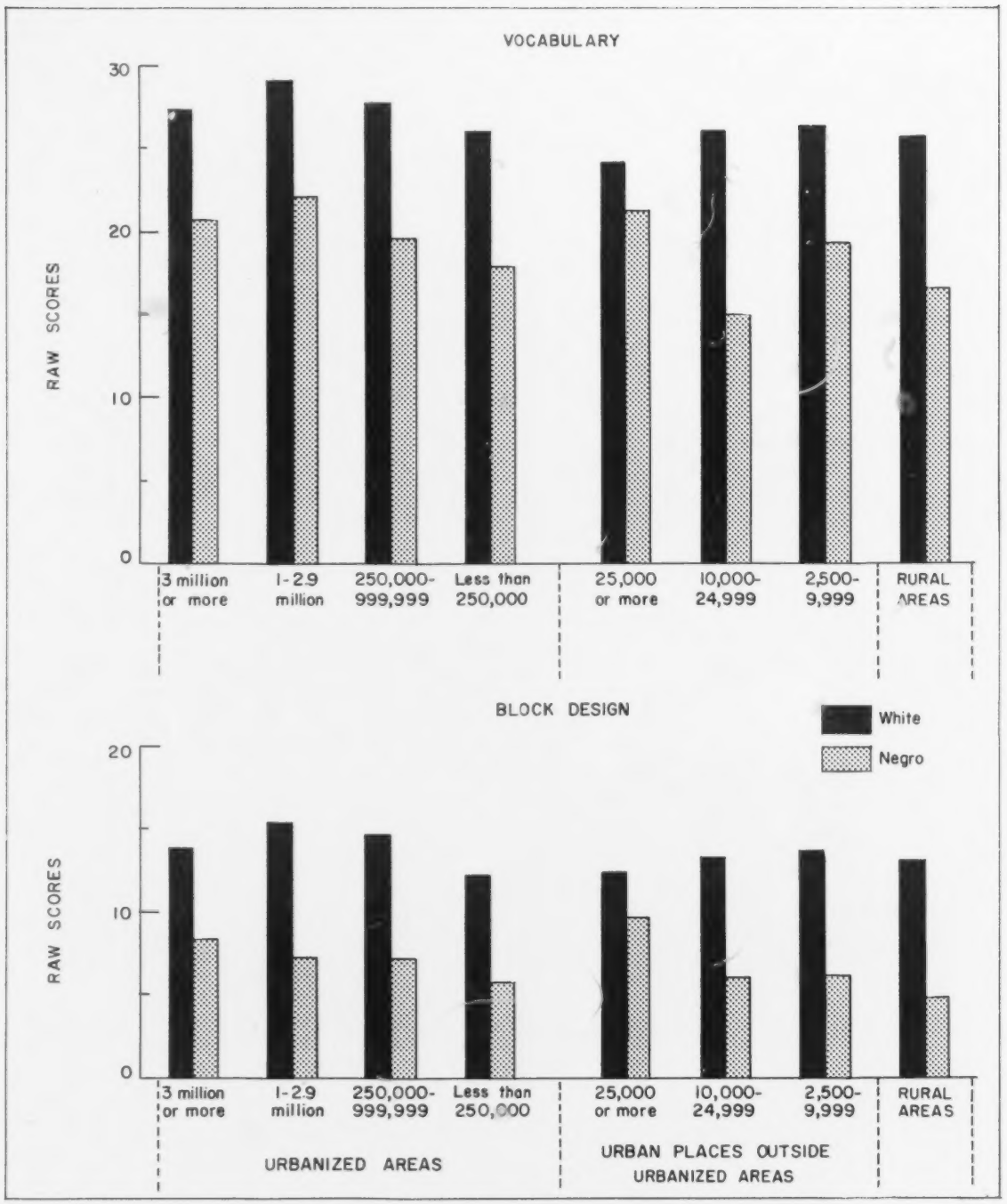

Figure 6. Average Vocabulary and Block Design raw scores on the Wechsler Intelligence Scale for white and Negro children by size of place of residence.

communities with diminishing employment opportunities and resources for development. It might be expected that this factor would in turn be reflected to some extent in the intellectual development of children residing in these areas.

As anticipated, children living in urban communities showing a population gain greater that that for the Nation as a whole score significantly higher (about 4 points more on the average) on both of these verbal and performance subtests of the WISC than do those in the three areas showing a less-rapid gain or loss in size (table 20 and figure 7). This pattern of superior performance of children in the rapidly expanding communities persists throughout the age range in the study.

White as well as Negro children in these rapidly expanding communities rate higher than do those from the other areas, though for Negro children the pattern is not consistent at each single year of age (table 21 and figure 8). Within each type of area white children perform significantly better than Negro children on the average both on the Vocabulary and Block Design subtests. Even Negro children in the expanding communities rate lower consistently, on the average, on these tests than do white children from areas of population loss or less-rapid gain.

Within each region, raw score ratings on both aspects of intellectual development are consistently highest for children living in areas with above-average gain in population (table 22 and figure 9). However, only in the South are the mean raw score differences large enough to be statistically significant. Since these gradations in population change are not evenly distributed throughout the country, estimates are substantially less reliable in one or two areas within each region than for the others. These areas where the sample size is excessively small include: in the Northeast, areas of population loss; in the Midwest, areas of loss and below-average gain; in the South, areas of below-average gain; and in the West, areas of below and of average gain.

Intellectual development ratings, in terms of deviation IQ's derived from both subtests, are also consistently higher on the average for chil-

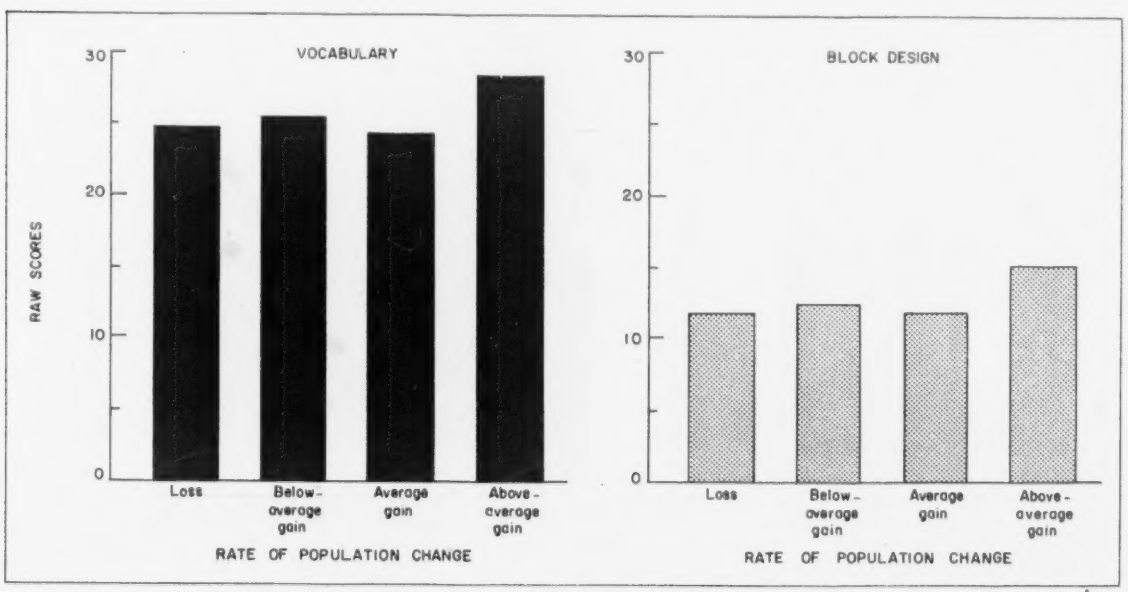

Figure 7. Average Vocabulary and Block Design raw scores on the Wechsler Intelligence Scale for Children by population change in place of residence from 1950 to 1960.

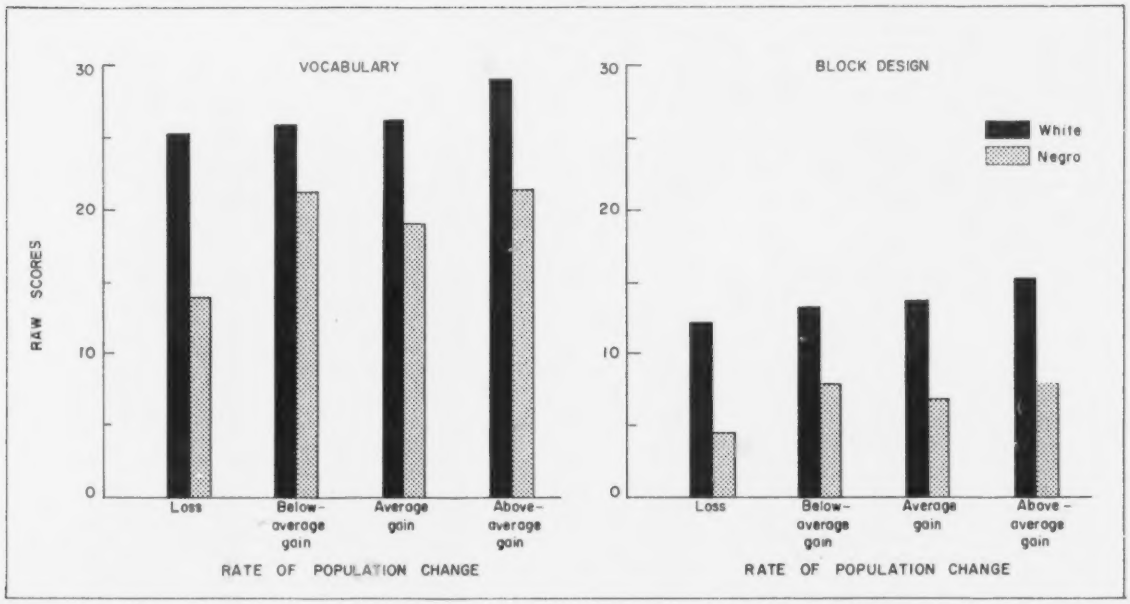

Figure 8. Average Vocabulary and Block Design raw scores on the Wechsler Intelligence Scale for white and Negro children by population change in place of residence from 1950 to 1960.

dren in rapidly expanding areas than elsewhere. This trend is found consistently among white but not Negro children in each area. Negro children in areas of population loss tend to rate lower than those from other areas but not significantly so. Children from rapidly expanding areas tend to rate higher than others in each region of the country. However, only in the South are the mean differences consistently in that direction and large enough to be statistically significant.

Income

Intellectual development of children as rated on either the Vocabulary or Block Design subtests was found to increase consistently with size of annual family income at each year of age for boys and girls. On both subtests the successive differences in mean raw score from one income level to the next higher were statistically significant up to those from families earning $10,000-$14,999. With few exceptions this pattern of relationship to income level was found throughout the age range (tables 23 and 24 and figure 10).

The pattern of relationship between intellectual maturity level and family income for white children is similar to that for all races combined (table 25).

Among Negro children, while a positive association does exist here also, because of the size of the sample and the small number of this racial group successive differences in mean scores from one income bracket to the next are not large enough to be statistically significant (table 25 and figure 11).

At each income level white children perform significantly better than Negro children on the average on each of the two WISC subtests used here.

A consistent pattern of positive association between ratings of intellectual maturity and family income was found in each of the four regions of the country. Mean scores on Vocabulary increased with income up to the highest level in the Northeast and up to the $10,000 bracket in the other three regions, where it either leveled off or dropped slightly (table 26 and figure 12). On the Block Design, the increases in mean scores persisted up to the highest income level

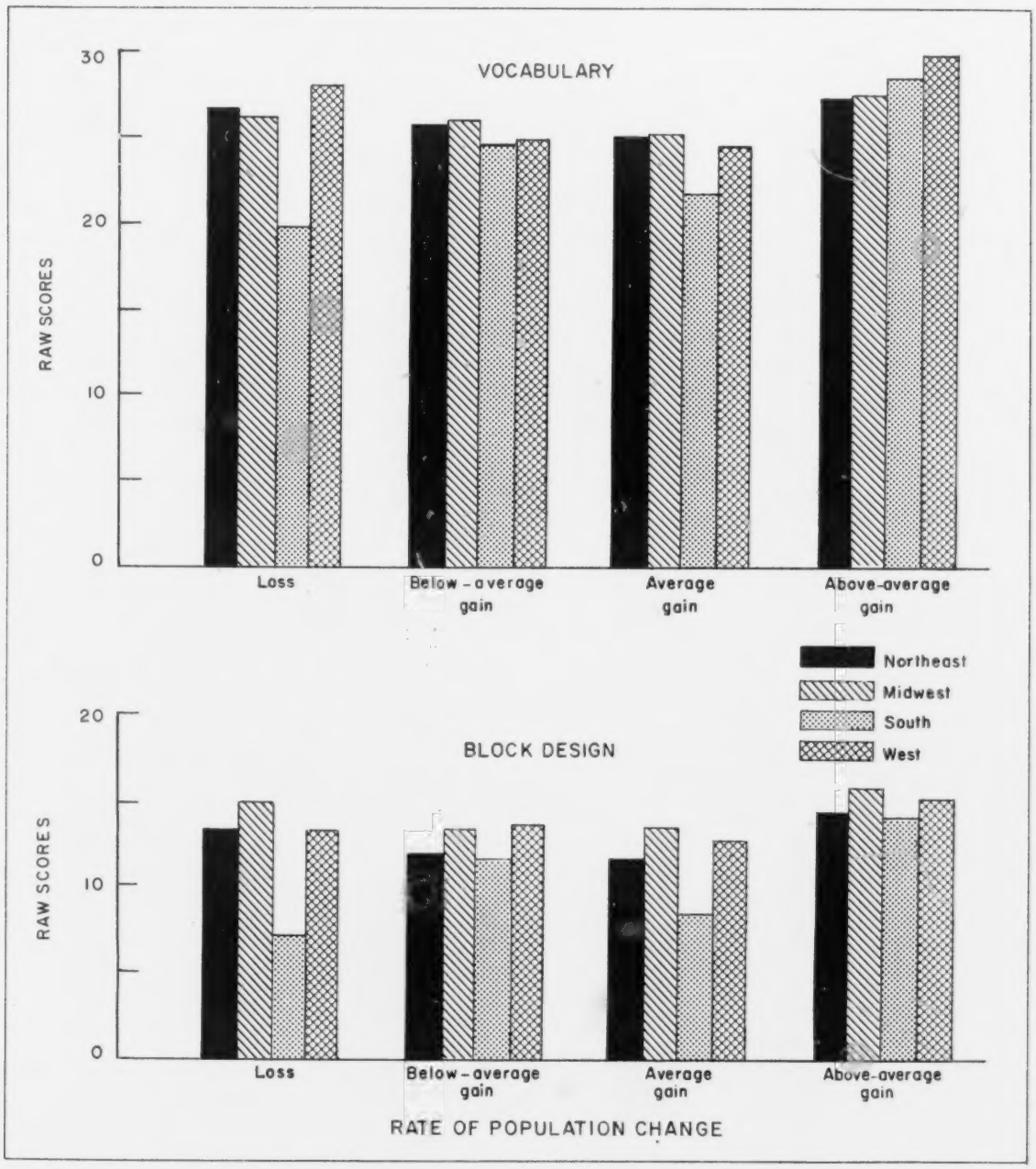

Figure 9. Average Vocabulary and Block Design raw scores on the Wechsler Intelligence Scale for Children by region and population change in place of residence from 1950 to 1960.

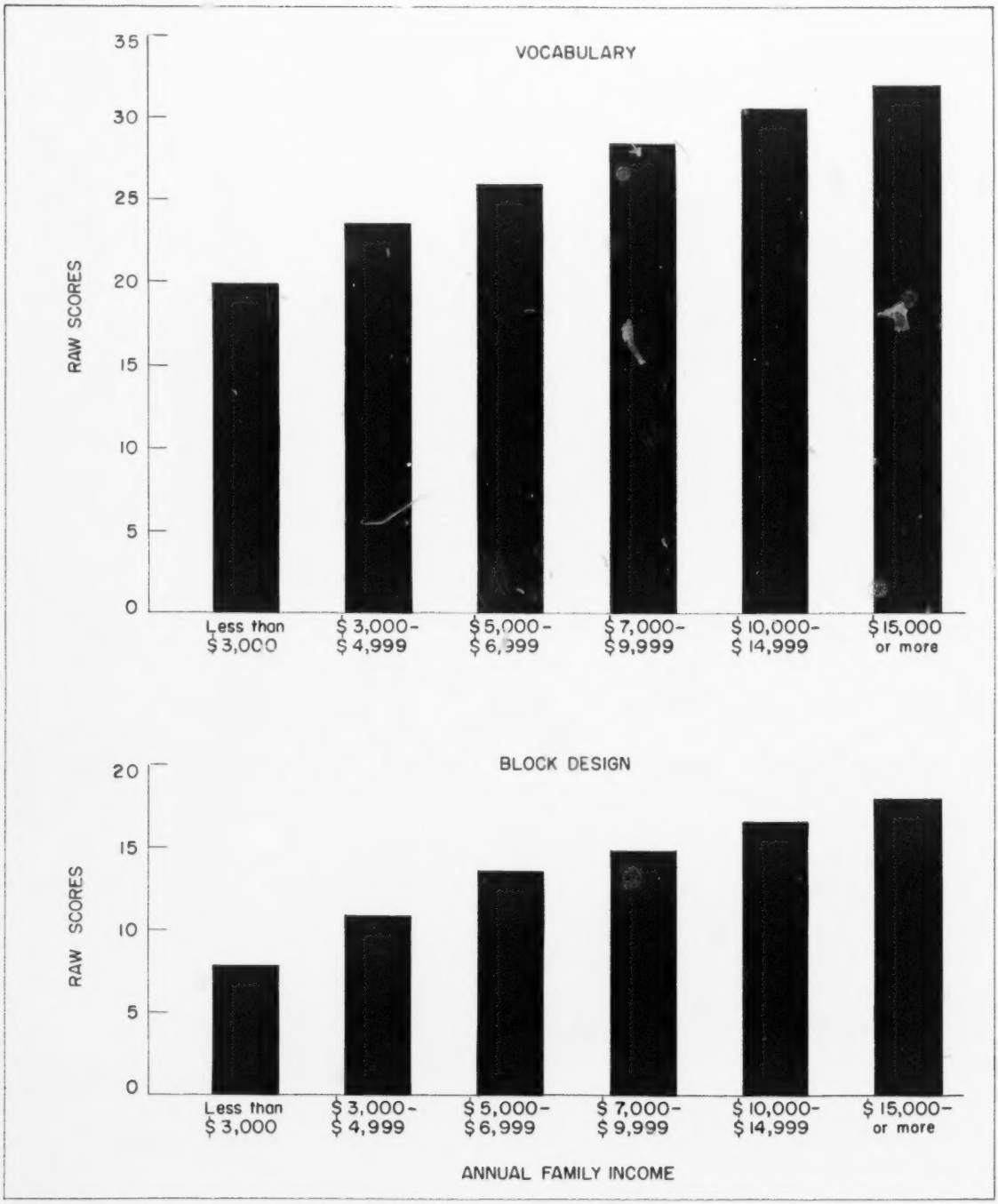

Figure 10. Average Vocabulary and Block Design raw scores on the Wechsler Intelligence Scale for Children by annual family income.

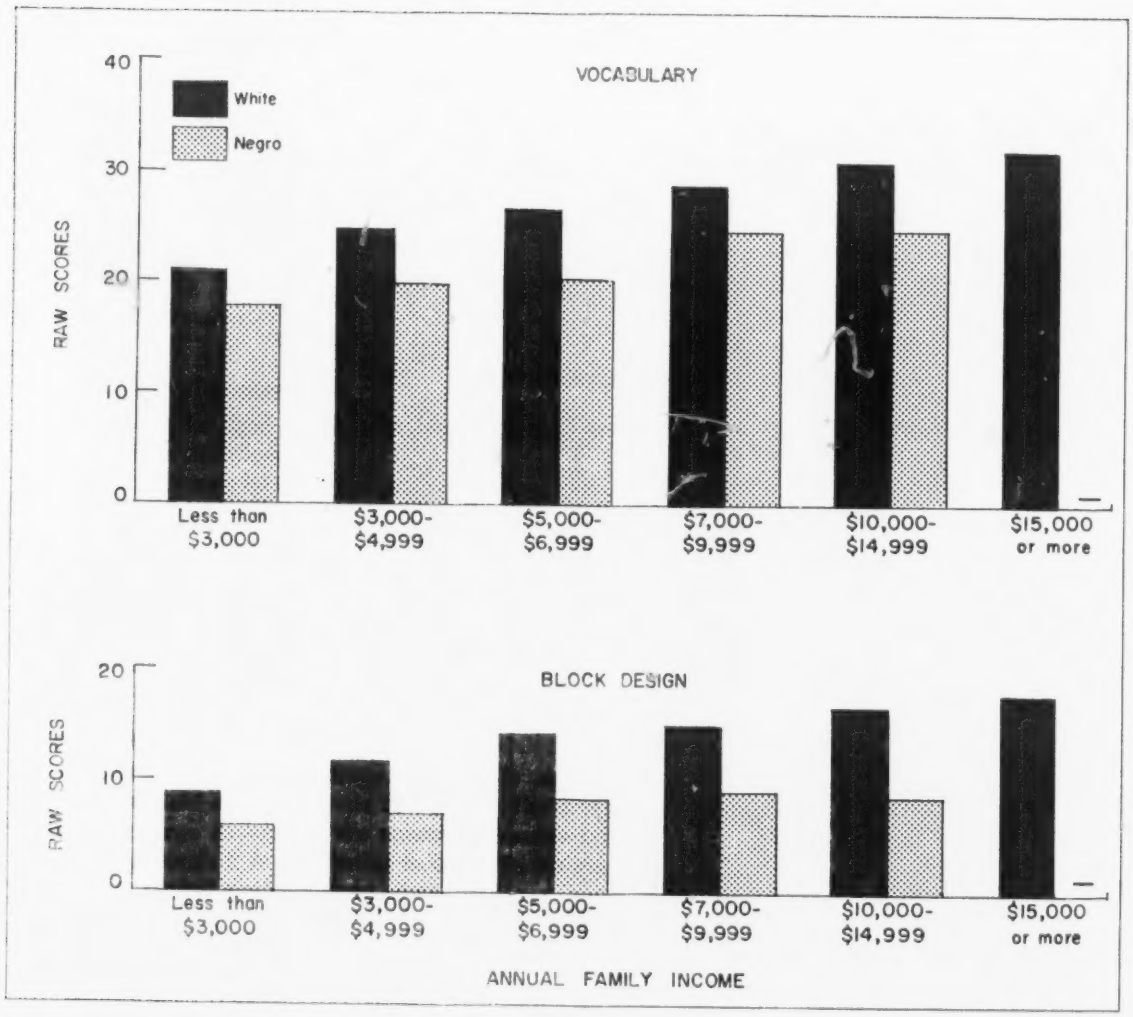

Figure 11. Average Vocabulary and Block Design raw scores on the Wechsler Intelligence Scale for white and Negro children by annual family income.

in each region except in the Midwest, where mean scores were identical in the two lowest income brackets. However, successive differences in either subtest were not consistently large enough to be statistically significant throughout.

The consistent pattern of increased intellectual development in terms of mean deviation IQ's (based on both subtests) with family income may be seen for the entire group of children, for white as well as Negro children, and for those in each region of the country (tables 27-29). While the differences in mean score from one income level to the next are not statistically significant throughout, those between at least the highest and lowest income levels are significant without exception.

The degree of association, as measured for convenience by linear correlation techniques, between IQ of children as rated here and the income of their families ($r = .43 \pm .027$) is even stronger than that with race ($r = -.34 \pm .035$) and is diminished only slightly when the effects of either race or race and region are held constant ($r = .37$) (appendix I).

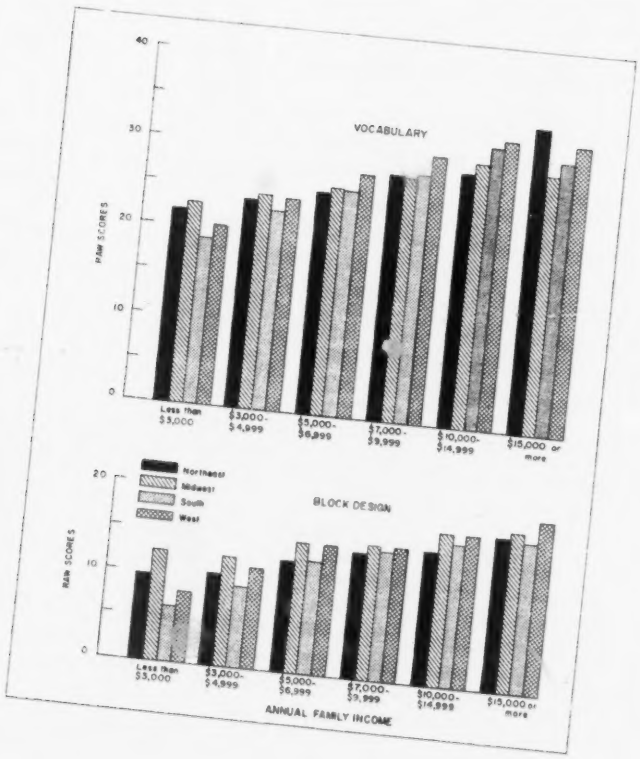

Figure 12. Average Vocabulary and Block Design raw scores on the Wechsler Intelligence Scale for Children by region and annual family income.

Education of Parent

Intellectual development of American children as rated on either subtest increased steadily with the number of years of formal schooling completed by the parent considered head of the household, similar to the relation found with annual family income (tables 30 and 31 and figure 13). On both Vocabulary and Block Design, average raw scores for these children increased steadily with the educational level of their parents, except for the negligible (non-significant) dip at 9-11 years on both subtests. The mean differences for the total group age 6-11 years were large enough to be statistically significant (with the exception noted above at 9-11 years of schooling) up through 16 years on Vocabulary and 13-15 years on Block Design.

This consistent pattern of increase in mean scores in intellectual development with the level of education of the parent was found throughout the age range tested among both boys and girls with few minor exceptions. The differences throughout were not consistently statistically significant, however, because of the smallness of the groups within some of the educational level classes.

White children show a pattern of relationship between their intellectual development and educational level of their parents that is very similar to that for all races combined, the only exception being a negligible increase rather than a slight dip in mean scores on Block Design of children whose parents had completed 9-11 years of schooling (table 32).

Among Negro children aged 6-11 years, mean raw scores on ratings of both verbal and performance aspects of intellectual development used here also generally increased with the educational level of their parents (table 33). On the Vocabulary subtest, the mean scores increased up to the highest educational level, except for the drop at 8 years of schooling, the consecutive differences being large enough to be statistically significant (with the size and design of the sample used here) only between those whose parents had completed 9-11 years and those completing 12 years. Mean raw scores on the Block Design subtest leveled off at 8 years but thereafter increased only to the group whose parents had completed 13-15 years.

The white-Negro differential in performance of children on these subtests of the WISC was maintained throughout the various educational levels of their parents (figure 14). Only at levels of 16 years or more of schooling on the Vocabulary subtest were the mean differences small enough to be considered negligible (not significant).

A similar pattern of association between educational level of parent and mean intellectual development scores for the children was found in each of the four geographic regions into which the country was divided for the purposes of this survey (tables 34-37 and figure 15). Minor exceptions (not statistically significant) to the general pattern of concurrent increase were found on the Vocabulary subtest only at 9-11 years of schooling completed in the Midwest and West and at 17 in the South; while mean raw scores on the Block Design lagged slightly at the 16 year level in the Northeast, 9-11 in the Midwest and 17 in the South.

In each of the regions, children whose parents had limited education of less than 8 years rated substantially lower on the average in these tests than did those whose parents had finished high school while the latter in turn scored significantly below those whose parents had completed four years of college work. However, successive mean differences in test scores between the eight successive educational groups considered here were not large enough to be consistently statistically significant throughout in each region, with the size of the sample used here, though the pattern was more distinct in the Midwest and the South than elsewhere.

Intellectual development of children in terms of deviation IQ's also shows this generally consistent increase with educational level of parents within each region and for both white and Negro children (tables 38-40).

An even stronger association exists between the IQ's of children as rated here and the education of their parents ($r = .48 \pm .017$) than that found with family income. Holding constant race and region reduces the degree of relationship of these test ratings with education of parent only slightly (to $r = .43$). A strong correlation with parents' educational level exists even when the income is held constant ($r = .31$), despite the fact that

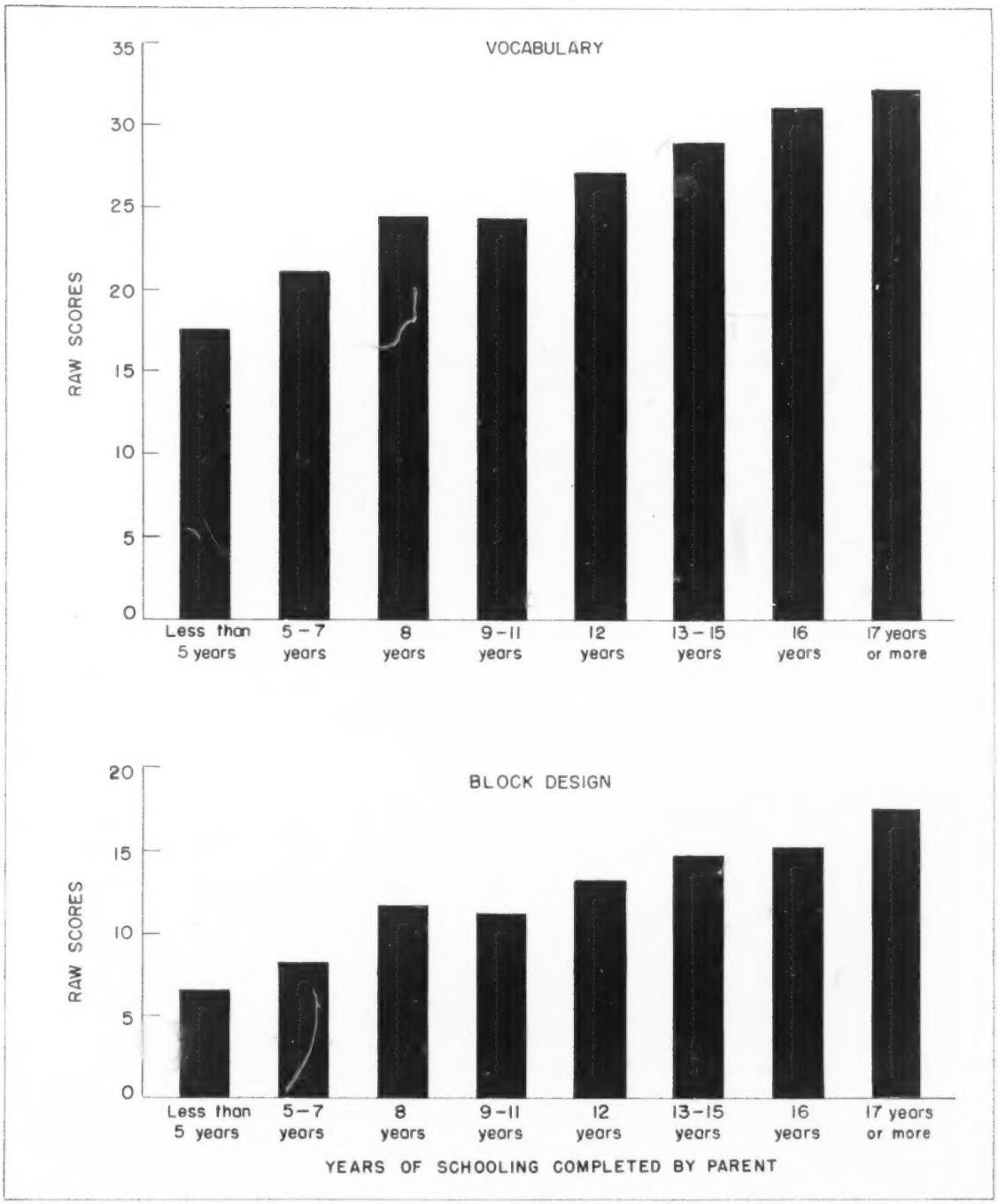

Figure 13. Average Vocabulary and Block Design raw scores on the Wechsler Intelligence Scale for Children by education of parent.

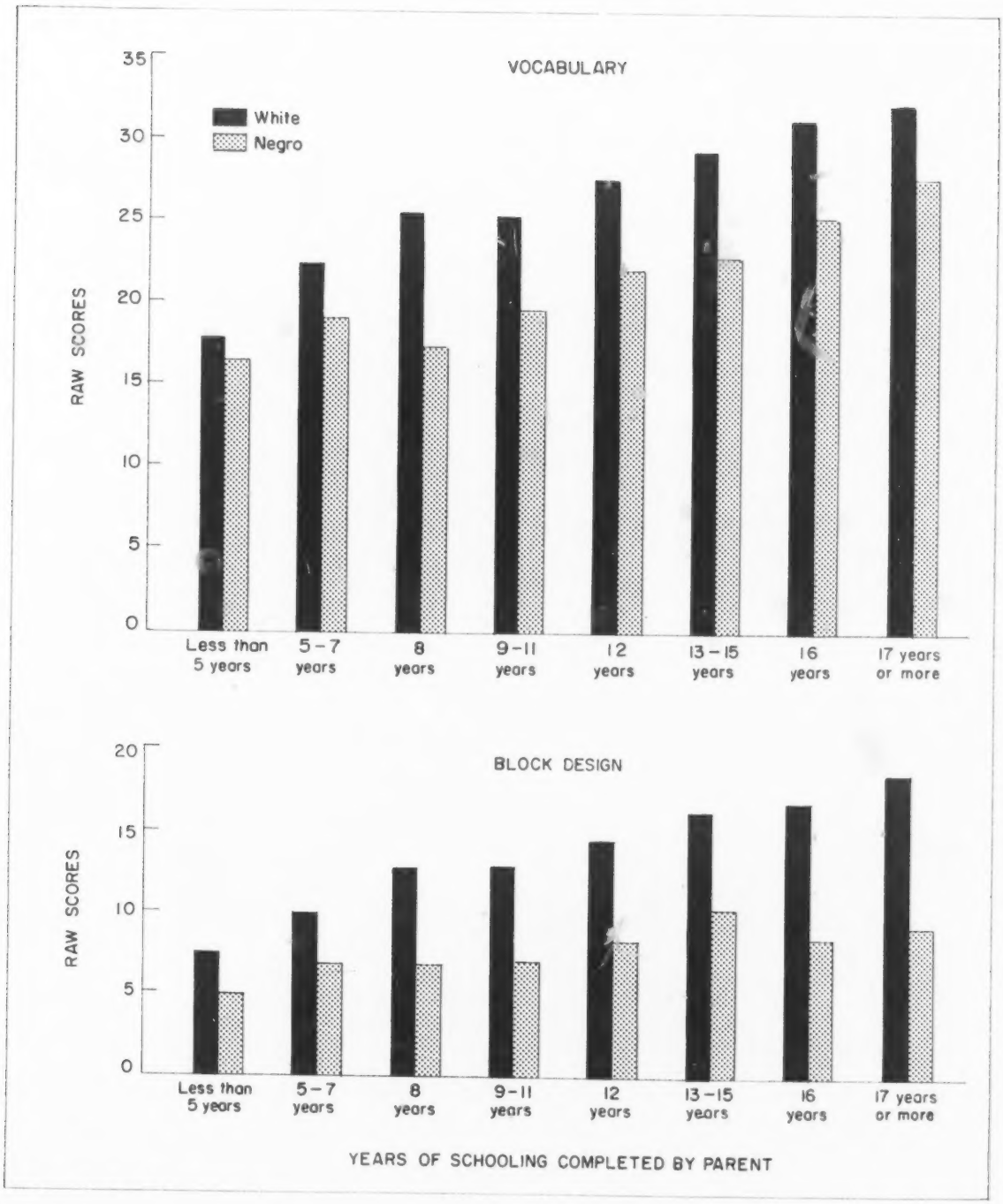

Figure 14. Average Vocabulary and Block Design raw scores on the Wechsler Intelligence Scale for white and Negro children by grade in school.

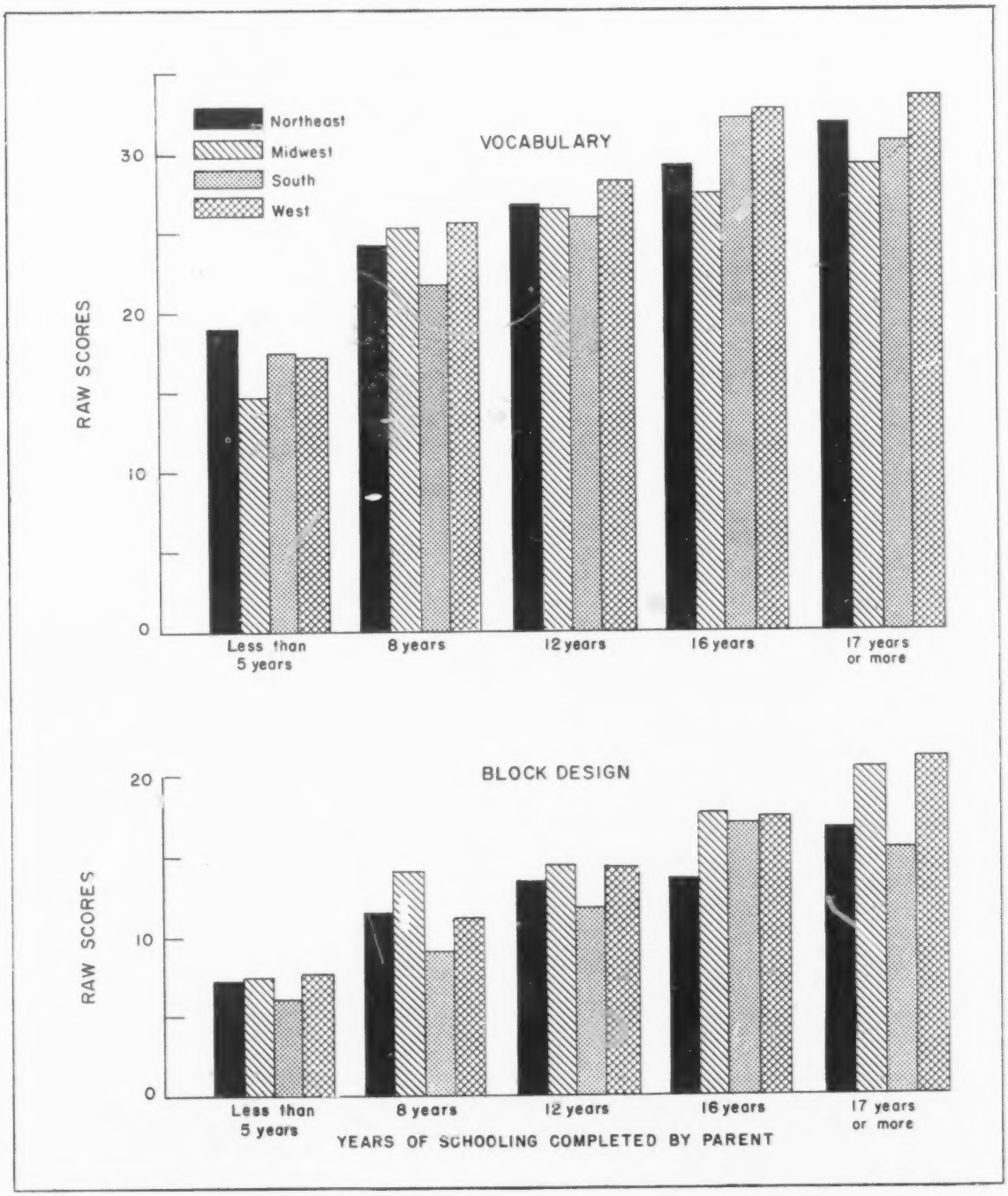

Figure 15. Average Vocabulary and Block Design raw scores on the Wechsler Intelligence Scale for Children by region and education of parent.

income and educational attainment in the general population are themselves fairly highly correlated (r=.58).

Grade in School

American children, from this study, show a continuous increase in mean raw scores on both the Vocabulary and Block Design subtests of the WISC from kindergarten through seventh grade, as indicated in a previous report.[6] Successive grade differences, on the average, are statistically significant from first through sixth grade on the verbal rating and from first through seventh grade on the performance part (tables 41 and 42). Since the age range in this survey was 6-11 years, those children in the kindergarten or seventh grade classes at the time of the examination are relatively smaller groups and could not be considered completely typical of either the total or normal group of children in those two grades. Test findings should be closely representative of noninstitutionalized American children in grades 1-6.

White and Negro children show consistent intellectual development with grade in school as rated here (tables 43 and 44). The successive mean differences in raw scores from one grade to the next highest are statistically significant from the first through the sixth grade on both subtests. This general pattern is found among both boys and girls.

At each grade level white children scored higher, on the average, than Negro children, the differences being large enough to be statistically significant from kindergarten through the seventh grade (figure 16). In the special ungraded classes, which included primarily those who are physically

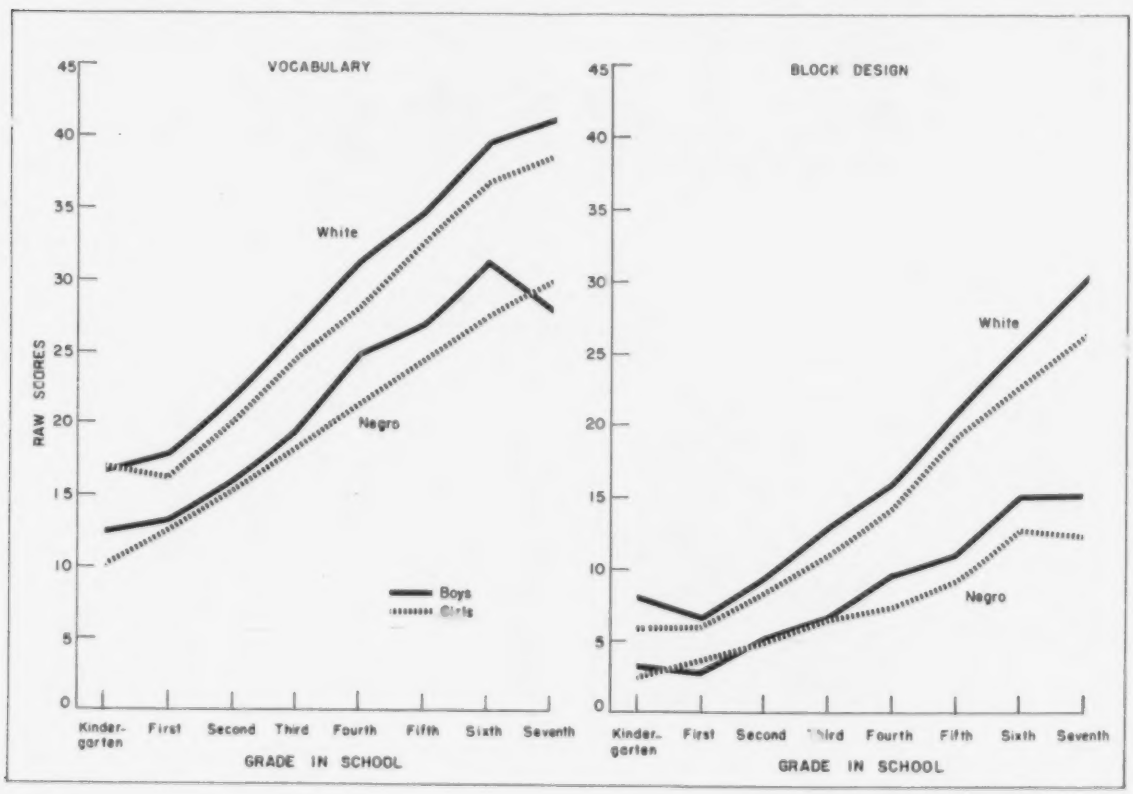

Figure 16. Average Vocabulary and Block Design raw scores on the Wechsler Intelligence Scale for white and Negro boys and girls by grade in school.

or mentally handicapped, Negro children obtained slightly, but not statistically significantly higher scores than their white counterparts.

In each of the four regions there is a consistent pattern of increase in mean raw scores on both subtests that in general is large enough to be significant from one grade to the next over grades 1-6, among boys and girls (tables 45-48 and figure 17).

Mean raw scores on both Vocabulary and Block Design are consistently lower in the South than in the other three regions for children in grades 1-6, though the differences are not large enough to be statistically significant throughout.

As would be expected the racial-regional pattern of intellectual development in terms of the deviation IQ is consistent with that shown by the raw scores from both subtests (tables 49-51).

Discussion

Clear-cut demographic and socioeconomic differentials were found in the intellectual development of children 6-11 years of age living outside institutions in the United States, as measured in this study by the Vocabulary and Block Design subtests of the WISC.

Even with the gross geographic grouping needed to produce reliable data with the size and design of the sample used here, marked regional differences are evident. Children from the South rated significantly lower on both verbal and performance aspects of intellectual development throughout the age range tested than did those from the other three regions. The differences in mean scores on both subtests were roughly the equivalent of one-third a standard deviation or more.

White children rated significantly higher than Negro children in both Vocabulary and Block Design subtests throughout the age range for boys and girls. Here the mean differences were roughly the equivalent of a full standard deviation or more across the age range, the difference tending to increase slightly with age. A significant racial differential was maintained at least for the total group in every region of the country and across every other demographic or socioeconomic variable considered here, practically without exception. These findings are in general consistent with previous research by Young and Bright,[9] Caldwell,[10] Blakemore,[11] and Racheile,[12] as well as others. However, it should be noted that a considerable part of the gross white-Negro differential is the result of differences in socioeconomic level. Since the WISC was originally developed and standardized using only white children, the lower ratings for the Negro children, after adjustment for other related variables, are generally considered to be strongly influenced by differences in cultural experiences reflecting unequal opportunities for intellectual development.

The dramatic findings with respect to racial and regional differentials should not be permitted to overshadow other far more significant socioeconomic trends relating to intellectual development of children generally consistent with findings from previous studies.[13-15] The present study showed clearly that both verbal and performance aspects of intellectual development of children as measured here were most strongly associated with education level of the children's parents and nearly as closely with their families' income. These relationships are both substantially greater than that found with race (correlations of +.48 with education, +.43 with income compared with -.34 with race). If the racial and regional influences are removed or held constant, the degree of association of intellectual development here with these two socioeconomic factors is reduced significantly—from 0.43 to 0.37 for income and from 0.48 to 0.43 for education. A significant relationship between IQ and education of parent exists even when the effect of the income level of the family is removed, although the degree of association is reduced by about one-third (from r=+.48 to +.31). (See appendix I.)

If the effect of the differences in educational attainment and income is removed, however, a significant white-Negro differential in IQ as measured here still persists but the degree of association is reduced by about one-third (from r= -.34 to -.23). The relationship of intellectual development of children to the socioeconomic status of their parents is maintained over all regional and racial subgroups.

American children from urban areas in the present study scored only slightly higher in these ratings of intellectual development than those from rural areas. A greater difference might have been

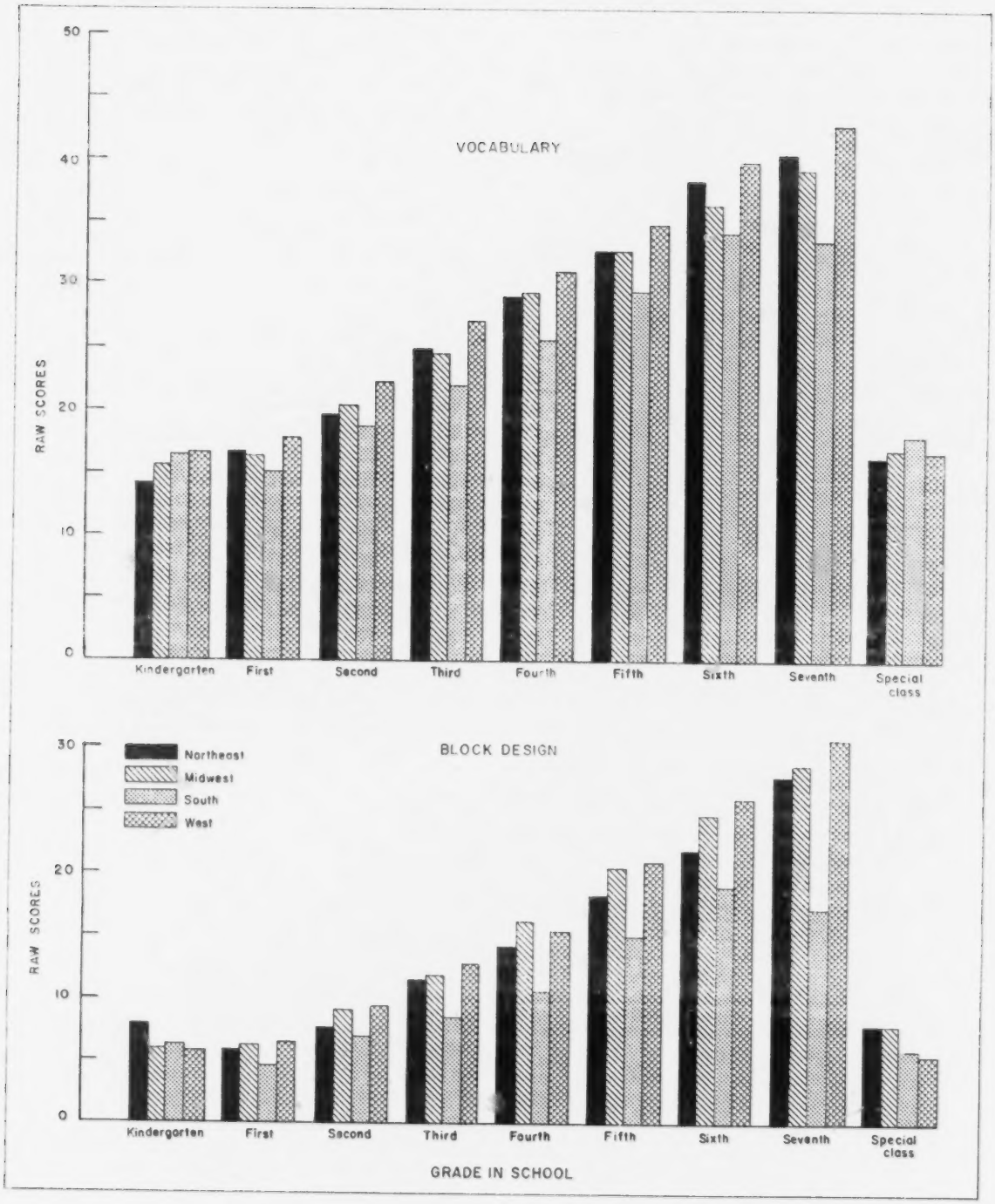

Figure 17. Average Vocabulary and Block Design raw scores on the Wechsler Intelligence Scale for Children by grade in school and region.

expected on the basis of Seashore's findings among the original Wechsler standardization group.[14] In the latter, children from urban areas rated significantly higher on the average than rural residents on both verbal and performance tests of the entire WISC battery.

The association of IQ to other economically related factors is less marked. Intellectual development of children was found to vary with the general economic stability of their area of residence, as indirectly measured by the population loss or gain between 1950 and 1960. Those from areas of above average gain rated higher on these tests, on the average, than those from areas showing a less rapid gain or loss in size, a pattern found within each region and for both white and Negro children.

The pattern of relationship of intellectual development to these demographic and socioeconomic variables is not completely consistent throughout the age range in the study primarily because the sample size was not large enough to produce reliable estimates for such small subgroups.

SUMMARY

This report presents estimates of the level of intellectual development of children, both verbal and performance aspects, among noninstitutionalized children 6-11 years of age in the United States in relation to selected demographic and socioeconomic factors. The findings are based on scores obtained on the Vocabulary and Block Design subtest of the Wechsler Intelligence Scale for Children administered to examinees in the Health Examination Survey of 1963-65. In the survey, a probability sample of 7,417 children was selected to represent the 24 million noninstitutionalized children of this age in the United States. The total of 7,119 or 96 percent of the sample examined were found to be closely representative of American children of this age with respect to age, sex, race, region and other available demographic and socioeconomic variables.

Findings are given in terms of raw scores, and scaled scores for each subtest and in the form of deviation IQ's based on the scaled scores from both subtests. (The latter two types of scores were derived directly from the distributions of raw scores obtained in this study.) Significant differentials in intellectual development were found for all variables considered here.

The strongest association found for both these measures of intellectual development of children was a positive one with the socioeconomic status of the family as determined by either family income or educational level of their parents.

Children living in the South significantly rated lower in intellectual development as measured here than those from the other regions of the country. This regional pattern was found for both white and Negro children.

White children rated substantially higher than Negro children on both subtests. This racial differential was maintained at least for the total group aged 6-11 years in every region of the country and across every other demographic and socioeconomic variable considered here, almost without exception, a finding that was expected since the test administered was developed using only white children.

Children from urban communities rated slightly higher than those from rural areas.

Those living in areas showing an above-average increase in population size between 1950 and 1960 rated higher than those in areas of decreasing size.

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Characteristic	Children 6-11 years	Region				Race	
		Northeast	Midwest	South	West	White	Negro
	Number of children in thousands						
Total	23,784	5,357	6,763	5,750	5,912	...	...
Race							
White	20,403	4,716	6,112	4,153	5,420	...	...
Negro	3,271	626	619	1,597	428	...	...
Other races	110	15	32	0	64	...	...
Residence							
Urban	15,554	4,075	4,578	2,876	4,025	12,873	2,625
Rural	8,230	1,282	2,185	2,874	1,887	7,530	646
Income							
Less than $3,000	4,353	406	680	2,350	915	2,894	1,448
$3,000-$4,999	4,248	801	1,135	1,129	1,183	3,347	898
$5,000-$6,999	5,297	1,470	1,662	904	1,260	4,765	480
$7,000-$9,999	4,816	1,297	1,688	633	1,197	4,556	250
$10,000-$14,999	2,782	731	1,025	327	698	2,744	29
$15,000 or more	1,086	315	326	200	243	1,075	-
Unknown	1,198	335	244	204	413	1,020	164
Education of parent							
Less than 5 years	1,673	134	77	955	506	1,209	463
5-7 years	2,225	374	310	1,165	375	1,439	778
8 years	2,597	466	984	565	582	2,281	316
9-11 years	4,671	1,234	1,481	967	988	3,810	823
12 years	7,295	1,745	2,538	1,087	1,925	6,643	626
13-15 years	1,867	451	570	282	562	1,781	86
16 years	1,823	475	459	311	576	1,769	42
17 years or more	1,306	425	278	286	316	1,268	26
Unknown	321	50	63	128	78	198	108

Table 2. Averages and standard deviations (SD) of raw scores on the Vocabulary and Block Design subtests of the Wechsler Intelligence Scale for Children, by age, sex, and region: United States, 1963-65

Age and sex	Northeast		Midwest		South		West	
	Average	SD	Average	SD	Average	SD	Average	SD
	Vocabulary raw score							
Both sexes								
6-11 years	26.3	10.30	26.3	9.52	23.0	10.06	26.8	10.48
6 years	16.6	5.52	16.4	4.66	15.3	5.56	17.2	6.57
7 years	20.4	6.58	19.9	5.83	17.8	7.08	21.2	7.20
8 years	25.3	7.07	24.6	6.62	21.3	7.34	25.3	8.32
9 years	29.1	8.00	28.9	7.17	24.4	8.61	29.3	8.02
10 years	32.7	9.04	32.6	7.80	27.8	9.57	33.1	8.98
11 years	36.5	9.96	35.2	8.24	31.8	10.76	36.4	9.28
Boys								
6-11 years	27.3	10.54	27.0	9.75	23.7	10.29	27.5	10.65
6 years	17.3	5.64	16.3	4.72	16.2	5.70	18.0	6.24
7 years	21.0	6.90	21.0	5.99	18.7	7.46	21.6	7.66
8 years	26.2	7.39	25.0	6.98	21.9	7.85	26.1	8.33
9 years	30.2	7.84	29.6	7.12	26.0	8.84	30.0	8.22
10 years	33.8	9.03	33.5	8.04	29.2	9.50	33.8	9.88
11 years	36.8	10.66	35.8	8.50	32.7	11.31	37.0	9.34
Girls								
6-11 years	25.2	9.95	25.6	9.22	22.2	9.77	26.0	10.23
6 years	15.8	5.11	16.4	4.59	14.2	5.14	16.4	6.78
7 years	19.8	6.30	18.9	5.50	16.9	6.56	20.5	6.44
8 years	24.5	6.70	24.0	6.13	20.7	6.68	24.3	8.21
9 years	27.8	7.97	28.2	7.15	22.6	8.01	28.5	7.73
10 years	31.3	8.85	31.6	7.38	26.6	9.47	32.4	7.96
11 years	36.2	9.15	34.5	7.93	30.9	10.18	35.6	9.15
	Block Design raw score							
Both sexes								
6-11 years	12.9	10.29	14.5	11.09	9.8	9.13	13.4	10.82
6 years	6.2	5.15	6.3	4.38	4.7	4.14	5.7	4.53
7 years	8.0	5.72	8.9	5.80	6.2	5.48	8.6	6.22
8 years	12.1	8.64	12.5	8.49	8.3	6.22	11.5	7.86
9 years	14.4	9.08	15.0	9.90	9.4	7.22	14.4	9.33
10 years	17.8	11.00	20.2	11.28	13.4	10.63	19.4	11.80
11 years	21.0	12.44	24.1	12.76	17.0	12.10	22.2	12.88
Boys								
6-11 years	14.0	10.85	15.3	11.48	9.9	9.42	13.7	11.03
6 years	6.4	5.84	6.3	4.67	4.6	4.58	5.8	4.84
7 years	8.8	6.64	9.5	6.18	6.5	6.50	9.2	6.97
8 years	13.5	10.01	13.7	9.16	7.8	5.61	12.6	8.45
9 years	15.5	9.34	15.8	10.41	10.1	7.76	14.5	9.24
10 years	18.4	10.98	20.7	11.19	14.2	11.09	18.4	12.09
11 years	22.3	12.47	25.2	13.06	18.2	12.02	22.7	13.25
Girls								
6-11 years	11.8	9.58	13.7	10.62	9.6	8.82	13.0	10.56
6 years	5.9	4.35	6.3	4.06	4.8	3.54	5.7	4.22
7 years	7.2	4.57	8.3	5.38	6.0	4.20	7.6	4.82
8 years	10.9	7.10	11.1	7.44	8.8	6.79	10.2	6.92
9 years	13.2	8.66	14.1	9.28	8.7	6.54	14.1	9.42
10 years	17.1	10.99	19.6	11.36	12.8	10.17	20.2	11.46
11 years	20.0	12.30	23.0	12.36	15.8	12.07	21.6	12.38

Table 3. Average scaled scores on the Vocabulary and Block Design subtests and average deviation IQ's on the Wechsler Intelligence Scale for Children, by age, sex, and region: United States, 1963-65

Age and sex	Vocabulary subtest				Block Design subtest				Both subtests			
	Northeast	Midwest	South	West	Northeast	Midwest	South	West	Northeast	Midwest	South	West
	Scaled score								Deviation IQ			
Both sexes												
6-11 years--	---	---	---	---	---	---	---	---	101.5	101.9	94.2	102.1
6 years	10.2	10.1	9.5	10.5	10.4	10.5	9.4	10.1	101.5	101.1	96.3	101.5
7 years	10.3	10.0	8.9	10.7	10.3	10.3	9.1	10.3	100.9	101.6	95.1	103.0
8 years	10.7	10.3	8.8	10.7	10.7	10.7	8.8	10.3	102.0	101.8	93.6	101.6
9 years	10.4	10.3	8.8	10.4	10.3	10.7	8.8	10.3	102.5	102.6	92.9	102.9
10 years	10.3	10.3	8.6	10.3	9.9	10.4	8.8	10.3	101.3	102.6	93.3	102.5
11 years	10.5	10.3	9.2	10.5	10.0	10.7	9.0	10.3	101.5	102.3	94.4	102.1
Boys												
6-11 years--	---	---	---	---	---	---	---	---	103.4	103.3	95.7	103.3
6 years	10.5	10.1	10.1	11.0	10.6	10.5	9.3	10.2	103.5	101.1	97.6	102.6
7 years	10.7	10.7	9.5	10.9	10.3	10.8	9.2	10.5	102.8	103.4	96.6	104.5
8 years	10.8	10.7	9.0	10.7	10.8	10.9	8.7	10.7	104.6	103.4	93.5	103.6
9 years	10.7	10.5	9.3	10.7	10.8	10.9	9.0	10.3	104.7	104.1	94.8	103.5
10 years	10.6	10.5	9.3	10.6	10.1	10.6	9.1	10.1	102.6	103.7	95.2	102.6
11 years	10.6	10.3	9.3	10.7	10.3	10.8	9.4	10.3	102.3	103.8	95.9	102.8
Girls												
6-11 years--	---	---	---	---	---	---	---	---	99.6	100.5	92.7	100.8
6 years	9.9	10.1	8.8	10.1	10.2	10.5	9.5	10.1	99.4	100.9	94.5	100.3
7 years	9.9	9.6	8.6	10.3	9.5	10.3	9.0	9.9	99.0	99.8	93.4	100.3
8 years	10.2	9.7	8.6	10.0	10.0	10.1	8.9	9.7	99.7	99.6	93.4	99.1
9 years	10.2	10.3	8.1	10.3	10.0	10.1	8.5	10.1	99.9	101.0	90.6	101.9
10 years	9.9	10.1	8.3	10.3	9.7	10.3	8.6	10.4	99.3	101.3	91.5	102.4
11 years	10.4	10.0	8.7	10.3	9.7	10.3	8.7	10.2	100.5	100.5	92.8	100.8

Table 4. Averages and standard deviations (SD) of raw scores on the Vocabulary and Block Design subtests of the Wechsler Intelligence Scale for Children, by age, sex, and race: United States, 1963-65

Age and sex	White		Negro		Other races[1]
	Average	SD	Average	SD	Average
	Vocabulary raw score				
Both sexes					
6-11 years	26.6	10.10	19.4	8.36	27.3
6 years	17.0	5.53	12.6	4.98	19.7
7 years	20.7	6.57	14.4	5.26	22.4
8 years	25.1	7.40	18.7	5.78	26.3
9 years	28.9	7.90	21.5	7.24	30.2
10 years	32.8	8.58	23.8	8.10	42.1
11 years	36.2	9.23	26.7	8.60	33.1
Boys					
6-11 years	27.5	10.29	19.8	8.57	27.1
6 years	17.6	5.46	12.9	5.14	18.7
7 years	21.6	6.80	14.3	5.44	21.0
8 years	25.8	7.71	19.0	5.94	23.1
9 years	30.0	7.75	21.7	7.19	30.7
10 years	33.8	8.90	25.2	7.73	37.8
11 years	37.0	9.53	27.1	8.85	27.0
Girls					
6-11 years	25.7	9.83	18.9	8.13	27.4
6 years	16.3	5.52	12.3	4.78	18.9
7 years	19.7	6.18	14.4	5.08	21.6
8 years	24.4	6.99	18.4	5.59	28.8
9 years	27.7	7.87	21.2	7.28	27.9
10 years	31.7	8.09	22.4	8.21	38.6
11 years	35.4	8.83	26.1	8.31	35.8
	Block Design raw score				
Both sexes					
6-11 years	13.6	10.80	6.9	6.19	14.8
6 years	6.1	4.71	3.1	2.69	8.8
7 years	8.5	6.03	4.4	3.33	7.8
8 years	12.0	8.24	6.3	3.91	20.5
9 years	14.2	9.35	7.1	5.22	8.5
10 years	19.1	11.56	10.2	7.72	18.6
11 years	22.8	12.76	11.3	8.07	22.7
Boys					
6-11 years	14.3	11.15	7.1	6.72	17.2
6 years	6.3	5.16	2.6	2.62	7.7
7 years	9.2	6.80	4.5	4.06	10.0
8 years	12.9	8.89	6.1	4.12	27.7
9 years	15.0	9.59	7.3	5.48	16.9
10 years	19.3	11.70	11.5	8.18	15.2
11 years	23.9	12.79	11.6	8.54	22.8
Girls					
6-11 years	13.0	10.38	6.7	5.61	13.0
6 years	6.0	4.20	3.6	2.67	8.8
7 years	7.8	5.03	4.4	2.38	5.7
8 years	11.0	7.37	6.3	3.69	7.9
9 years	13.4	9.03	6.9	4.95	14.0
10 years	18.8	11.42	8.9	7.00	18.8
11 years	21.5	12.62	10.8	7.56	22.6

[1]The sample of children of other races was too small to give sufficiently stable estimates of standard deviations for publication.

Table 5. Average scaled scores on the Vocabulary and Block Design subtests and average deviation IQ's on the Wechsler Intelligence Scale for Children, by age, sex, and race: United States, 1963-65

Age and sex	Vocabulary subtest			Block Design subtest			Both subtests		
	White	Negro	Other races	White	Negro	Other races	White	Negro	Other races
	Scaled score						Deviation IQ		
Both sexes									
6-11 years	---	---	---	---	---	---	101.9	87.8	104.6
6 years	10.3	8.1	11.9	10.4	8.4	12.0	101.8	89.2	108.5
7 years	10.5	7.5	11.3	10.3	8.1	10.1	102.1	88.0	102.0
8 years	10.7	7.7	10.8	10.7	8.2	13.7	101.7	88.6	118.5
9 years	10.3	7.7	10.8	10.1	8.0	8.3	102.0	87.8	108.1
10 years	10.3	7.3	13.3	10.3	8.0	10.2	102.0	87.3	105.0
11 years	10.4	7.6	9.4	10.3	7.8	10.3	102.1	86.6	101.5
Boys									
6-11 years	---	---	---	---	---	---	103.6	88.3	106.3
6 years	10.7	8.3	11.5	10.5	8.1	11.7	103.1	88.8	*
7 years	10.9	7.4	10.7	10.5	8.2	11.3	104.2	87.7	*
8 years	10.7	7.7	9.7	10.7	8.1	16.1	103.5	88.4	*
9 years	10.7	7.7	11.1	10.7	8.0	11.0	103.9	87.9	*
10 years	10.6	7.8	11.9	10.3	8.2	9.3	103.1	89.7	*
11 years	10.7	7.7	7.7	10.6	7.9	10.3	103.6	87.1	*
Girls									
6-11 years	---	---	---	---	---	---	100.2	87.3	103.2
6 years	10.1	7.9	11.6	10.3	8.5	12.0	100.4	89.4	*
7 years	9.9	7.5	10.9	10.1	8.1	8.8	99.8	87.9	*
8 years	10.1	7.7	11.7	10.0	8.2	8.7	99.8	88.3	*
9 years	10.1	7.7	10.3	10.0	8.0	10.0	100.1	87.3	*
10 years	10.1	6.9	12.2	10.3	7.6	10.3	100.8	84.8	*
11 years	10.3	7.4	10.3	10.2	7.6	10.3	100.5	85.7	*

Table 6. Average Vocabulary raw scores on the Wechsler Intelligence Scale for white and Negro children, by age, sex, and region: United States, 1963-65

Age and sex	White				Negro			
	Northeast	Midwest	South	West	Northeast	Midwest	South	West
	Raw score							
Both sexes								
6-11 years	27.1	27.0	24.7	27.2	20.4	20.0	18.3	20.9
6 years	17.1	16.8	16.4	17.5	12.4	12.1	12.6	13.7
7 years	21.1	20.5	19.3	21.7	15.4	14.7	13.9	14.8
8 years	[illegible]0	25.3	22.7	25.7	20.0	17.9	18.2	20.2
9 years	3[illegible].0	29.4	26.1	29.5	21.8	23.2	20.4	26.5
10 years	34.0	33.3	29.9	33.6	24.7	26.7	21.8	25.6
11 years	37.8	36.1	34.0	37.0	29.2	26.3	25.1	29.8
Boys								
6-11 years	28.1	27.7	25.8	28.0	21.1	20.7	18.6	21.3
6 years	17.9	16.6	17.4	18.3	11.8	12.8	13.1	13.6
7 years	21.8	21.5	20.8	22.1	14.4	16.1	13.7	13.3
8 years	26.6	25.8	23.6	26.5	22.5	16.8	18.4	20.7
9 years	31.0	30.1	28.6	30.0	22.8	21.3	21.0	*
10 years	34.9	34.4	31.0	34.3	25.5	27.1	23.0	26.2
11 years	38.1	36.6	35.3	37.7	28.5	27.3	25.2	*
Girls								
6-11 years	26.0	26.2	23.7	26.4	19.9	19.2	18.0	20.5
6 years	16.2	16.9	15.1	16.7	12.9	11.1	12.0	13.4
7 years	20.3	19.6	17.9	21.0	15.9	13.1	14.0	16.0
8 years	25.4	24.6	21.8	24.8	18.1	18.6	17.7	19.8
9 years	28.8	28.7	23.8	28.7	20.6	23.7	19.3	25.6
10 years	32.6	32.0	28.9	33.0	23.2	25.6	20.9	*
11 years	37.4	35.6	32.8	36.0	29.1	24.7	24.8	28.4

Table 7. Average Block Design raw scores on the Wechsler Intelligence Scale for white and Negro children, by age, sex, and region: United States, 1963-65

Age and sex	White				Negro			
	Northeast	Midwest	South	West	Northeast	Midwest	South	West
	Raw score							
Both sexes								
6-11 years	13.5	15.2	11.3	13.8	8.1	8.3	5.8	7.6
6 years	6.5	6.6	5.4	3.9	3.0	3.3	2.9	3.7
7 years	8.4	9.2	7.3	8.8	4.8	5.8	3.5	5.3
8 years	12.5	13.2	9.5	11.8	8.7	6.1	5.3	6.4
9 years	15.0	15.6	10.9	14.7	9.4	7.9	6.1	7.8
10 years	18.8	20.1	15.3	20.0	10.9	13.8	7.9	11.5
11 years	22.7	25.3	19.2	23.0	12.1	12.3	10.3	12.6
Boys								
6-11 years	14.6	16.0	11.6	14.1	8.9	9.0	6.5	7.9
6 years	6.9	6.6	5.4	6.0	2.6	3.1	2.2	3.4
7 years	9.3	9.8	7.8	9.5	4.6	6.8	3.2	5.5
8 years	13.9	14.4	9.3	12.8	10.2	6.1	4.7	7.0
9 years	16.0	16.4	12.0	14.7	10.5	7.1	6.4	7.2
10 years	19.3	21.4	16.1	19.1	11.6	16.2	7.6	11.2
11 years	23.7	26.5	20.7	23.6	13.6	10.3	10.8	12.7
Girls								
6-11 years	12.4	14.4	10.9	13.5	7.3	7.4	6.1	7.3
6 years	6.2	6.5	5.3	5.8	3.3	3.5	3.6	3.9
7 years	7.5	8.7	6.8	7.8	4.9	4.8	3.8	5.1
8 years	11.3	11.7	9.8	10.7	7.6	5.9	6.0	6.0
9 years	13.8	14.7	9.9	14.6	8.3	8.2	5.5	7.8
10 years	18.2	20.4	14.6	20.8	9.8	8.9	8.1	11.5
11 years	21.5	24.0	17.8	22.2	10.1	13.7	9.6	12.1

Table 8. Average deviation IQ's on the Wechsler Intelligence Scale for white and Negro children, by age, sex, and region: United States, 1963-65

Age and sex	White				Negro			
	Northeast	Midwest	South	West	Northeast	Midwest	South	West
Both sexes	Deviation IQ							
6-11 years	103.1	103.2	97.4	103.0	89.7	89.1	85.6	91.0
6 years	102.9	102.3	99.5	102.4	89.5	88.3	88.6	94.1
7 years	102.4	102.9	98.8	104.0	90.8	90.7	86.2	91.3
8 years	103.3	103.2	96.6	102.4	93.1	88.0	86.8	90.9
9 years	104.1	103.6	96.1	103.4	91.0	91.9	85.7	94.5
10 years	103.2	103.8	96.6	103.5	89.1	92.8	83.8	91.3
11 years	103.6	103.9	97.7	103.0	90.3	88.0	84.6	91.1
Boys								
6-11 years	105.0	104.6	99.5	104.1	90.4	90.2	86.0	91.2
6 years	105.4	102.3	101.1	103.6	87.1	88.2	88.0	*
7 years	104.7	104.6	101.2	105.6	87.9	93.0	85.3	*
8 years	105.5	105.1	97.0	104.2	96.4	86.4	86.1	90.8
9 years	106.0	105.1	99.4	103.7	92.6	88.4	86.2	*
10 years	104.3	105.0	98.2	103.5	90.1	94.9	84.7	90.9
11 years	104.2	105.4	99.7	104.0	89.6	86.2	84.7	*
Girls								
6-11 years	101.1	101.8	95.4	101.6	89.0	88.0	85.3	90.7
6 years	100.4	102.0	97.1	100.9	90.9	86.9	88.7	*
7 years	100.1	101.3	96.0	101.2	91.2	87.1	86.0	91.6
8 years	101.2	100.9	95.8	100.1	89.5	87.5	87.0	90.4
9 years	101.5	102.0	92.9	102.6	87.8	91.7	83.9	92.7
10 years	101.4	102.3	95.0	103.4	85.9	87.8	82.7	*
11 years	102.4	102.1	95.7	101.6	88.2	86.9	83.5	88.1

Table 9. Averages and standard deviations (SD) of raw scores on the Vocabulary subtest of the Wechsler Intelligence Scale for Children, by age, sex, and size of place of residence: United States, 1963-65

Age and sex	Total urban		Urbanized areas				Urban places outside urbanized areas			Rural areas	
	Average	SD	3 million or more	1,000,000-2,999,999	250,000-999,999	Less than 250,000	25,000 or more	10,000-24,999	2,500-9,999	Average	SD
			Vocabulary raw score								
Both sexes											
6-11 years	25.7	10.27	25.6	28.4	26.0	24.1	24.1	25.3	25.7	25.0	9.99
6 years	16.4	5.68	16.2	18.6	16.2	16.2	15.7	16.2	15.8	16.0	5.58
7 years	19.8	6.88	19.5	21.8	19.6	18.8	19.2	20.5	19.8	19.6	6.52
8 years	24.3	7.63	24.6	26.7	23.6	21.7	22.6	24.7	26.2	23.5	7.26
9 years	28.0	8.20	28.7	30.4	29.5	25.5	25.9	26.1	27.6	27.1	8.13
10 years	31.7	8.93	32.4	34.4	31.7	28.3	30.3	31.2	33.2	30.9	9.26
11 years	35.0	9.69	34.4	38.5	35.5	34.7	33.8	34.1	34.4	34.0	9.72
Boys											
6-11 years	26.5	10.46	26.1	29.4	27.3	25.0	24.8	26.0	26.0	25.8	10.26
6 years	16.9	---	16.5	19.3	17.0	16.8	16.3	16.4	15.6	16.8	---
7 years	20.6	---	19.8	22.7	20.3	20.3	18.8	21.1	21.3	20.5	---
8 years	25.0	---	25.2	27.5	23.7	22.9	26.2	24.3	28.0	23.6	---
9 years	29.0	---	29.6	31.2	32.8	25.4	25.7	26.4	29.8	28.1	---
10 years	32.7	---	33.1	35.5	34.2	30.2	27.9	32.6	31.4	32.4	---
11 years	35.7	---	34.2	39.5	36.5	34.7	33.6	34.8	34.8	35.1	---
Girls											
6-11 years	24.9	10.00	25.2	27.2	24.6	23.1	23.4	24.3	25.4	24.1	9.64
6 years	15.9	---	15.7	17.9	15.4	15.4	15.0	15.8	16.0	15.2	---
7 years	19.0	---	19.2	20.6	18.5	17.6	19.5	19.4	18.0	18.7	---
8 years	23.5	---	24.0	25.7	23.4	20.4	19.3	25.0	24.6	23.4	---
9 years	26.9	---	27.8	29.4	26.2	25.5	25.8	26.2	26.0	26.1	---
10 years	30.5	---	31.4	33.0	29.1	26.5	33.8	*	34.7	29.3	---
11 years	34.2	---	34.6	37.3	34.4	34.4	33.6	32.0	33.3	32.9	---

Table 10. Averages and standard deviations (SD) of raw scores on the Block Design subtest of the Wechsler Intelligence Scale for Children, by age, sex, and size of place of residence: United States, 1963-65

Age and sex	Total urban		Urbanized areas				Urban places outside urbanized areas			Rural areas	
	Average	SD	3 million or more	1,000,000-2,999,999	250,000-999,999	Less than 250,000	25,000-or more	10,000-24,999	2,500-9,999	Average	SD
			Block Design raw score								
Both sexes											
6-11 years	12.7	10.53	12.5	14.4	13.3	10.7	12.2	12.8	13.0	12.4	10.58
6 years	5.8	4.59	5.8	7.3	5.4	4.6	5.8	5.6	5.4	5.6	4.63
7 years	8.0	6.21	8.6	8.5	8.6	5.9	8.0	10.1	7.8	7.4	5.23
8 years	11.1	7.58	11.0	12.6	10.9	7.8	9.1	11.9	11.7	11.7	8.97
9 years	13.3	9.26	14.4	14.2	14.0	11.1	13.4	12.5	12.1	13.0	9.21
10 years	17.9	11.58	17.4	19.5	18.3	15.0	18.9	16.4	21.4	17.3	11.36
11 years	21.3	12.60	19.6	24.7	22.1	20.6	20.5	20.2	26.4	20.7	13.28
Boys											
6-11 years	13.3	10.89	13.2	15.2	14.2	10.9	12.8	13.6	12.8	13.0	11.04
6 years	5.8	---	5.6	7.8	5.2	4.4	6.6	5.2	6.0	5.5	---
7 years	8.6	---	9.4	9.4	9.4	6.0	9.0	11.2	8.6	7.5	---
8 years	11.9	---	11.7	13.5	12.2	8.8	11.2	11.4	11.5	12.5	---
9 years	14.1	---	14.9	14.9	17.0	11.8	13.0	11.6	12.0	13.5	---
10 years	18.2	---	18.4	20.0	18.4	14.6	15.8	18.0	20.8	18.1	---
11 years	22.3	---	20.8	25.5	23.0	19.6	21.2	22.6	19.7	22.6	---
Girls											
6-11 years	12.1	10.09	11.8	13.6	12.4	10.5	11.6	11.6	13.2	11.8	10.05
6 years	5.7	---	5.8	6.7	5.6	4.7	5.2	6.4	4.7	5.6	---
7 years	7.3	---	7.7	7.4	7.5	5.7	6.9	8.6	6.8	7.3	---
8 years	10.2	---	10.3	11.3	9.5	6.7	7.3	12.4	11.9	10.9	---
9 years	12.6	---	13.9	13.2	11.1	10.2	13.7	13.3	12.2	12.4	---
10 years	17.6	---	16.1	18.8	18.1	15.4	23.8	13.3	21.9	16.5	---
11 years	20.3	---	18.4	23.8	20.9	21.7	19.6	15.9	22.5	18.9	---

Table 11. Average Vocabulary and Block Design raw scores on the Wechsler Intelligence Scale for white children, by age, sex, and size of place of residence: United States, 1963-65

Age and sex	Total urban	Urbanized areas				Urban places outside urbanized areas			Rural areas
		3 million or more	1,000,000-2,999,999	250,000-999,999	Less than 250,000	25,000 or more	10,000-24,999	2,500-9,999	
Both sexes	Vocabulary raw score								
6-11 years	26.7	27.3	29.2	27.6	25.9	24.2	25.9	26.3	25.7
6 years	17.1	17.2	19.2	17.3	17.3	15.7	16.8	16.1	16.4
7 years	20.8	20.9	22.5	21.5	19.7	19.3	20.5	20.7	20.2
8 years	25.2	26.3	27.9	24.8	23.2	22.6	25.5	26.6	24.0
9 years	29.0	30.5	31.1	30.2	28.0	25.8	27.2	27.9	28.0
10 years	32.9	34.9	35.1	33.7	30.7	30.3	31.9	33.7	31.8
11 years	36.3	37.4	39.2	37.1	36.2	34.6	35.2	35.4	34.9
Boys 6-11 years	27.6	27.7	30.2	29.0	27.1	24.8	26.6	26.5	26.6
Girls 6-11 years	25.8	26.8	28.1	26.1	24.7	23.5	25.0	26.1	24.7
Both sexes	Block Design raw score								
6-11 years	13.7	13.8	15.4	14.7	12.2	12.3	13.2	13.7	13.1
6 years	6.1	6.4	7.7	6.9	5.2	5.8	5.6	5.9	5.9
7 years	8.6	9.5	9.1	9.9	6.5	8.0	10.4	8.2	7.8
8 years	12.0	12.2	13.7	11.5	8.9	9.2	12.4	12.1	12.3
9 years	14.3	15.9	15.2	15.3	12.8	13.4	13.2	12.8	13.6
10 years	19.2	19.5	20.6	20.0	17.3	18.9	16.9	22.1	18.1
11 years	22.9	22.5	25.7	24.3	22.2	21.2	20.9	22.2	21.9
Boys 6-11 years	14.4	14.4	16.2	15.7	12.5	13.0	14.0	13.5	13.8
Girls 6-11 years	13.1	13.3	14.5	13.6	12.0	11.7	11.9	13.8	12.4

Table 12. Average Vocabulary and Block Design raw scores on the Wechsler Intelligence Scale for Negro children, by age, sex, and size of place of residence: United States, 1963-65

Age and sex	Total urban	Urbanized areas				Urban places outside urbanized areas			Rural areas
		3 million or more	1,000,000-2,999,999	250,000-999,999	Less than 250,000	25,000 or more	10,000-24,999	2,500-9,999	
Both sexes	Vocabulary raw score								
6-11 years	19.7	20.7	22.1	19.6	17.9	21.3	14.9	19.4	16.5
6 years	12.7	12.7	14.9	12.8	12.7	11.3	12.0	13.4	11.6
7 years	14.5	15.0	17.3	13.3	15.1	17.6	26.3	11.6	13.1
8 years	18.9	19.9	19.5	18.6	18.4	27.0	13.6	22.2	16.8
9 years	22.0	22.2	27.0	26.0	18.7	34.3	22.9	26.1	16.8
10 years	24.3	26.3	28.6	23.2	21.1		13.3	16.8	19.7
11 years	27.0	27.4	32.6	28.5	25.9	22.8	17.9	20.5	23.7
Boys 6-11 years	20.2	21.0	22.8	20.6	18.4	22.8	13.6	20.2	16.5
Girls 6-11 years	19.2	20.4	21.5	18.4	17.5	18.0	15.9	18.6	16.5
Both sexes	Block Design raw score								
6-11 years	7.1	8.4	7.3	7.2	5.7	9.6	6.0	6.1	4.8
6 years	3.2	3.6	4.6	3.0	2.5	5.0	6.5	1.4	2.2
7 years	4.6	5.7	4.6	4.4	3.1	9.1	2.3	4.1	2.9
8 years	6.4	7.6	5.3	6.7	5.3	7.5	5.0	5.6	5.1
9 years	7.4	8.7	6.7	7.8	6.7	17.0	7.1	4.9	4.8
10 years	10.5	12.0	10.9	10.9	7.6	-	2.0	13.4	7.6
11 years	11.7	12.2	15.3	12.2	11.2	9.2	10.4	5.8	7.5
Boys 6-11 years	7.4	9.1	7.7	7.4	5.8	10.5	4.2	4.7	4.7
Girls 6-11 years	6.9	7.8	7.0	7.1	5.6	7.6	7.3	7.2	4.9

Table 13. Average Vocabulary and Block Design raw scores on the Wechsler Intelligence Scale for Children in the Northeast by age, sex, and size of place of residence: United States, 1963-65

Age and sex	Total urban	Urbanized areas				Urban places outside urbanized areas			Rural areas
		3 million or more	1,000,000-2,999,999	250,000-999,999	Less than 250,000	25,000 or more	10,000-24,999	2,500-9,999	
Both sexes	Vocabulary raw score								
6-11 years	26.2	25.1	28.3	27.1	28.2	24.3	27.2	27.4	27.3
6 years	16.5	15.4	18.5	19.1	19.1	17.8	18.0	15.7	17.0
7 years	20.3	19.4	23.5	21.0	21.6	17.4	*	20.8	21.3
8 years	25.3	24.6	27.2	25.3	27.0	21.5	26.0	30.0	26.1
9 years	29.0	28.7	31.5	27.1	27.8	27.6	35.0	36.2	29.3
10 years	32.5	31.5	35.5	31.9	34.0	23.3	-	34.1	33.8
11 years	36.2	34.0	38.8	34.1	38.6	37.0	34.5	*	39.0
Boys 6-11 years	27.2	25.5	30.3	27.4	29.2	27.2	25.4	28.7	28.6
Girls 6-11 years	25.1	24.7	26.3	26.8	27.2	21.0	28.3	25.3	26.0
Both sexes	Block Design raw score								
6-11 years	12.7	11.4	15.2	14.6	13.2	10.3	14.1	13.6	14.9
6 years	6.0	4.9	8.3	11.0	5.2	4.6	5.5	5.4	7.6
7 years	8.1	7.8	10.3	8.6	6.4	6.6	*	11.0	7.3
8 years	11.8	11.0	14.2	11.4	9.4	7.8	12.0	12.3	13.0
9 years	14.2	13.2	16.0	12.2	16.0	13.0	20.0	22.4	15.8
10 years	17.4	15.6	20.9	17.0	18.3	10.2	-	17.8	20.7
11 years	20.7	17.8	25.2	23.9	23.0	16.3	18.0	*	25.1
Boys 6-11 years	13.7	12.0	16.5	15.8	13.0	12.8	20.1	14.4	16.5
Girls 6-11 years	11.6	10.8	13.8	13.1	13.5	7.6	10.5	12.0	13.3

Table 14. Average Vocabulary and Block Design raw scores on the Wechsler Intelligence Scale for Children in the Midwest by age, sex, and size of place of residence: United States, 1963-65

Age and sex	Total urban	Urbanized areas				Urban places outside urbanized areas			Rural areas
		3 million or more	1,000,000-2,999,999	250,000-999,999	Less than 250,000	25,000 or more	10,000-24,999	2,500-9,999	
Both sexes	Vocabulary raw score								
6-11 years	26.3	24.7	28.8	23.8	26.6	25.9	27.1	25.9	26.4
6 years	16.3	14.7	18.2	14.6	14.6	16.3	16.8	15.8	16.6
7 years	20.0	17.5	20.7	18.4	19.2	20.8	23.2	21.7	20.2
8 years	24.5	23.6	27.5	19.6	22.4	24.3	30.2	27.7	24.0
9 years	28.8	27.6	30.0	28.6	29.4	27.7	27.1	27.7	29.4
10 years	32.4	31.3	34.8	29.9	32.2	31.7	32.4	32.2	33.1
11 years	35.1	32.2	39.2	30.2	35.4	34.1	33.3	33.9	35.8
Boys 6-11 years	27.0	25.0	29.2	25.1	28.1	27.0	27.9	25.7	27.3
Girls 6-11 years	25.6	24.4	28.3	22.3	25.3	24.8	26.3	26.0	25.6
Both sexes	Block Design raw score								
6-11 years	14.4	13.1	15.5	12.9	14.2	14.2	14.1	15.4	15.3
6 years	6.3	6.2	6.9	3.8	5.6	5.6	7.9	6.2	6.6
7 years	8.9	8.6	8.7	9.3	7.8	9.2	8.2	8.1	9.0
8 years	12.4	10.9	14.7	11.8	8.5	9.4	14.4	16.2	13.0
9 years	14.8	14.1	14.7	14.6	13.8	16.7	13.9	14.1	15.9
10 years	20.0	18.2	21.0	16.4	21.2	20.1	16.1	26.6	21.5
11 years	23.8	20.4	25.9	20.8	23.8	25.3	24.0	19.9	26.6
Boys 6-11 years	15.2	14.0	15.9	14.4	15.2	15.7	13.1	14.7	16.2
Girls 6-11 years	13.6	12.0	15.0	11.2	13.2	12.8	15.1	15.9	14.3

Table 15. Average Vocabulary and Block Design raw scores on the Wechsler Intelligence Scale for Children in the South by age, sex, and size of place of residence: United States, 1963-65

Age and sex	Total urban	Urbanized areas				Urban places outside urbanized areas			Rural areas
		3 million or more	1,000,000-2,999,999	250,000-999,999	Less than 250,000	25,000 or more	10,000-24,999	2,500-9,999	
	Vocabulary raw score								
Both sexes									
6-11 years	23.1	-	23.8	26.6	20.8	29.6	20.0	24.6	21.7
6 years	15.3	-	16.8	17.6	15.6	18.7	13.0	15.7	14.2
7 years	17.9	-	18.1	18.4	18.2	26.4	17.4	17.0	17.0
8 years	21.4	-	22.6	23.5	20.0	27.0	17.9	24.0	20.0
9 years	24.4	-	26.6	30.1	21.0	28.4	22.0	27.4	23.0
10 years	28.1	-	24.4	31.9	21.9	39.9	21.3	31.4	26.2
11 years	32.1	-	34.3	35.8	32.6	38.4	26.4	32.8	29.2
Boys 6-11 years	23.9	-	25.1	29.0	21.6	28.6	21.6	25.3	22.1
Girls 6-11 years	22.3	-	22.5	24.4	19.9	30.6	17.6	23.9	21.3
	Block Design raw score								
Both sexes									
6-11 years	9.9	-	10.6	12.6	7.4	15.5	8.5	11.5	8.7
6 years	4.8	-	5.6	6.3	4.0	9.7	4.3	3.8	4.2
7 years	6.2	-	7.0	6.1	4.5	12.0	7.6	6.4	6.0
8 years	8.3	-	8.3	8.5	6.4	11.4	7.7	10.3	8.1
9 years	9.4	-	9.2	13.0	7.6	10.2	6.5	9.0	9.0
10 years	13.8	-	15.7	17.6	8.3	26.8	8.7	18.0	11.2
11 years	17.3	-	21.6	21.1	16.7	22.8	14.2	20.9	13.9
Boys 6-11 years	10.1	-	11.5	13.7	7.9	14.9	9.0	11.5	8.5
Girls 6-11 years	9.7	-	9.6	11.6	6.8	16.0	7.8	11.5	8.9

Table 16. Average Vocabulary and Block Design raw scores on the Wechsler Intelligence Scale for Children in the West by age, sex, and size of place of residence: United States, 1963-65

Age and sex	Total urban	Urbanized areas				Urban places outside urbanized areas			Rural areas
		3 million or more	1,000,000-2,999,999	250,000-999,999	Less than 250,000	25,000 or more	10,000-24,999	2,500-9,999	
	Vocabulary raw score								
Both sexes									
6-11 years	26.8	29.6	29.7	26.4	21.3	18.3	28.5	26.2	26.7
6 years	17.2	21.1	21.0	15.8	13.5	7.9	18.5	15.9	16.7
7 years	21.0	23.4	22.0	21.0	16.4	14.1	20.8	20.8	21.9
8 years	25.1	26.7	27.4	24.4	16.7	18.1	25.0	27.4	25.8
9 years	29.1	31.8	31.7	24.6	25.6	16.6	28.8	27.1	30.1
10 years	33.0	38.4	34.9	31.5	23.2	26.6	35.9	34.3	33.6
11 years	36.3	39.4	38.5	38.3	25.8	23.8	37.6	34.9	36.0
Boys 6-11 years	27.5	30.6	30.6	27.2	23.5	17.4	28.9	26.2	27.6
Girls 6-11 years	26.0	28.7	28.5	25.7	18.0	19.2	27.8	26.2	25.7
	Block Design raw score								
Both sexes									
6-11 years	13.4	15.7	13.9	13.8	8.8	9.5	15.5	13.1	13.1
6 years	5.8	7.9	7.7	4.8	3.2	2.8	6.5	6.0	4.9
7 years	8.4	11.2	6.4	9.9	5.4	5.6	11.8	7.9	7.7
8 years	11.3	11.0	11.2	11.3	7.1	8.6	12.4	11.6	12.4
9 years	14.3	18.8	14.4	14.6	9.8	7.7	17.0	11.4	14.2
10 years	19.2	21.4	17.2	19.4	11.4	16.9	18.9	23.0	19.4
11 years	21.6	24.9	23.5	23.2	16.4	13.8	20.4	21.4	22.4
Boys 6-11 years	13.7	15.9	14.8	14.1	9.2	8.0	17.9	12.8	13.4
Girls 6-11 years	13.0	15.5	12.7	13.5	8.3	10.9	11.4	13.4	12.7

Table 17. Average deviation IQ's on the Wechsler Intelligence Scale for Children, by age, sex, and size of place of residence: United States, 1963-65

Age and sex	Total urban	Urbanized areas				Urban places outside urbanized areas			Rural areas
		3 million or more	1,000,000-2,999,999	250,000-999,999	Less than 250,000	25,000 or more	10,000-24,999	2,500-9,999	
	Deviation IQ								
Both sexes									
6-11 years	100.1	100.4	104.4	100.5	95.9	98.2	100.0	100.7	99.0
6 years	100.1	100.3	106.2	100.0	97.5	99.7	99.7	99.3	99.0
7 years	100.2	100.9	103.5	101.1	95.8	99.7	105.0	100.7	98.9
8 years	99.9	100.2	104.6	99.1	93.5	96.2	101.3	102.4	99.8
9 years	100.2	102.2	103.8	102.6	95.6	98.4	98.8	99.0	98.9
10 years	100.1	100.5	103.9	100.6	95.1	100.0	98.6	104.1	99.0
11 years	100.1	98.8	105.4	101.2	99.5	98.6	99.9	100.0	98.7
Boys									
6-11 years	101.6	101.5	106.2	102.9	97.0	99.1	101.2	101.5	100.5
6 years	101.2	100.6	108.1	100.9	98.1	101.9	99.0	99.5	100.3
7 years	102.2	102.1	106.0	102.8	97.6	100.3	107.0	104.1	100.0
8 years	101.6	101.5	106.6	100.6	95.5	102.1	99.7	104.1	100.4
9 years	102.0	103.4	105.1	108.4	95.8	97.3	97.6	100.9	100.3
10 years	101.3	102.0	104.9	102.7	96.7	95.6	100.8	101.8	101.0
11 years	101.4	99.3	106.6	102.5	98.6	99.0	101.9	99.6	101.1
Girls									
6-11 years	98.5	99.2	102.4	98.1	94.7	97.3	98.2	99.8	97.4
6 years	99.0	99.6	104.2	98.7	96.0	96.8	100.0	97.9	97.6
7 years	98.3	99.4	100.2	98.1	93.7	98.6	100.7	96.5	97.6
8 years	98.1	98.6	101.8	97.2	90.7	90.0	102.2	100.4	98.9
9 years	98.4	100.8	102.0	96.7	94.8	98.8	98.5	97.3	97.2
10 years	98.8	98.5	102.3	98.1	93.3	105.7	92.4	105.7	96.8
11 years	98.7	98.1	103.7	99.6	99.8	97.0	94.0	99.2	96.4

Table 18. Average deviation IQ's on the Wechsler Intelligence Scale for white and Negro children, by age, sex, and size of place of residence: United States, 1963-65

Race, age, and sex	Total urban	Urbanized areas				Urban places outside urbanized areas			Rural areas
		3 million or more	1,000,000-2,999,999	250,000-999,999	Less than 250,000	25,000 or more	10,000-24,999	2,500-9,999	
	Deviation IQ								
White									
Both sexes 6-11 years	102.1	103.7	106.2	103.4	99.2	98.4	101.0	101.9	100.3
6 years	102.0	103.1	107.3	103.1	100.5	99.7	101.1	100.6	100.2
7 years	102.3	104.0	105.4	105.4	97.7	100.2	105.4	102.6	100.3
8 years	101.8	103.1	107.2	101.2	96.5	96.3	103.0	103.1	100.9
9 years	102.2	103.3	105.6	104.7	99.7	98.6	100.4	100.0	100.4
10 years	102.2	104.5	105.4	103.7	99.1	100.0	99.9	105.1	100.4
11 years	102.3	103.2	106.6	104.1	102.0	99.7	100.9	101.6	100.3
Boys 6-11 years	103.8	104.8	108.1	105.9	100.7	99.3	102.2	102.8	102.1
Girls 6-11 years	100.4	102.6	104.0	100.7	97.6	97.5	99.2	101.1	98.6
Negro									
Both sexes 6-11 years	88.4	90.1	91.8	88.5	85.0	93.6	83.5	87.5	82.7
6 years	89.4	91.0	96.0	90.8	88.5	*	100.0	86.0	86.5
7 years	88.4	91.1	92.9	87.5	87.4	*	*	87.8	84.1
8 years	88.9	91.8	89.6	89.0	86.8	95.0	79.0	89.0	85.6
9 years	88.6	90.4	95.4	93.6	84.8	108.0	*	90.0	80.4
10 years	87.9	91.0	93.2	88.3	84.5	-	*	95.5	82.0
11 years	87.1	88.0	95.5	89.6	85.6	85.0	78.0	83.6	81.7
Boys 6-11 years	88.9	90.9	91.9	89.9	85.0	96.4	80.3	88.0	82.7
Girls 6-11 years	87.8	89.3	91.6	87.1	85.0	87.7	85.9	87.1	82.6

Table 19. Average deviation IQ's on the Wechsler Intelligence Scale for Children, by age, sex, size of place of residence, and region: United States, 1963-65

Region, age, and sex	Total urban	Urbanized areas				Urban places outside urbanized areas			Rural areas
		3 million or more	1,000,000-2,999,999	250,000-999,999	Less than 250,000	25,000 or more	10,000-24,999	2,500-9,999	
	Deviation IQ								
Northeast									
Both sexes 6-11 years	101.1	98.9	106.5	102.6	102.6	96.8	103.3	105.1	104.5
6 years	101.1	97.5	109.0	113.5	103.9	102.5	126.2	111.4	105.2
7 years	100.9	99.7	108.8	108.5	100.7	97.3	152.5	114.2	101.1
8 years	101.4	100.0	106.7	105.1	103.7	93.8	119.7	114.2	107.4
9 years	102.4	101.0	107.0	104.2	105.5	99.8	133.6	127.6	103.8
10 years	100.8	98.5	107.5	103.4	105.0	96.5	-	103.4	106.1
11 years	100.9	97.5	107.9	101.2	105.8	101.8	99.4	162.0	106.5
Boys 6-11 years	102.9	99.8	109.1	104.8	104.2	100.1	107.1	105.5	107.5
Girls 6-11 years	99.4	98.1	103.9	99.9	101.1	93.1	101.0	104.4	101.3
Midwest									
Both sexes 6-11 years	101.8	99.2	105.1	97.6	99.9	101.6	102.8	102.5	103.0
6 years	100.9	100.8	104.6	96.5	96.7	101.4	105.8	99.9	102.9
7 years	101.5	98.4	104.0	102.2	101.1	104.6	104.2	102.7	102.2
8 years	101.8	99.4	108.3	97.3	98.1	98.8	113.1	107.6	102.0
9 years	102.2	101.1	104.3	100.6	103.3	105.8	99.7	102.0	104.0
10 years	102.4	100.5	105.5	99.3	103.9	104.4	99.5	107.0	104.7
11 years	102.1	97.9	106.9	96.0	103.2	103.2	100.9	102.7	104.3
Boys 6-11 years	103.2	101.2	106.4	99.6	101.8	102.0	102.9	103.3	104.2
Girls 6-11 years	100.4	97.0	103.7	95.3	98.2	101.1	102.7	102.0	101.8
South									
Both sexes 6-11 years	94.5	-	96.2	100.2	90.9	110.2	91.4	97.0	91.4
6 years	96.6	-	101.3	103.5	95.7	120.1	93.2	94.9	93.2
7 years	95.3	-	97.5	96.2	92.5	118.2	98.6	95.1	93.5
8 years	93.8	-	94.6	98.1	90.2	104.1	92.2	99.8	92.1
9 years	93.1	-	97.2	102.8	87.8	100.5	90.7	97.7	90.9
10 years	93.7	-	94.8	101.3	84.0	123.8	90.6	101.6	90.0
11 years	94.9	-	101.4	101.9	96.6	105.1	95.8	100.0	90.0
Boys 6-11 years	96.0	-	98.3	103.0	92.5	112.2	92.2	98.5	92.7
Girls 6-11 years	93.0	-	94.1	97.7	89.0	108.4	90.3	95.6	90.2
West									
Both sexes 6-11 years	102.1	108.4	105.4	101.9	90.5	88.1	105.4	101.9	102.0
6 years	101.8	114.3	112.1	98.6	94.6	83.3	107.8	100.6	99.2
7 years	103.0	110.1	103.3	104.9	93.9	90.2	121.4	102.8	102.6
8 years	101.4	104.4	104.7	100.7	89.1	91.9	101.0	103.3	103.5
9 years	102.8	109.1	106.0	105.1	95.7	84.2	103.9	99.5	104.1
10 years	102.4	110.3	103.8	101.7	93.0	93.4	108.3	107.7	103.3
11 years	102.1	107.7	105.7	104.5	89.0	87.3	107.0	101.8	102.3
Boys 6-11 years	103.4	109.0	107.1	104.1	91.6	87.1	108.4	102.4	102.8
Girls 6-11 years	100.8	107.8	103.0	99.5	88.9	89.1	100.2	101.4	101.0

Table 20. Average raw scores on the Vocabulary and Block Design subtests and average deviation IQ's from the Wechsler Intelligence Scale for Children, by age, sex, and population change in place of residence from 1950 to 1960: United States, 1963-65

Age and sex	Rate of population change											
	Loss	Below average gain	Average gain	Above average gain	Loss	Below average gain	Average gain	Above average gain	Loss	Below average gain	Average gain	Above average gain
Both sexes	Vocabulary raw score				Block Design raw score				Deviation IQ			
6-11 years	24.6	25.4	24.3	28.3	11.7	12.4	11.8	15.1	98.0	99.6	98.0	104.6
6 years	16.2	16.0	15.5	18.1	5.3	5.6	5.5	6.7	98.9	99.3	98.2	104.8
7 years	19.2	19.7	18.6	21.9	7.3	7.6	7.7	9.1	98.5	99.5	98.3	104.4
8 years	23.9	23.5	23.2	26.4	10.8	10.7	11.0	12.5	99.2	98.4	98.5	103.8
9 years	26.5	28.2	27.0	30.0	12.0	13.0	12.7	15.7	97.4	100.4	98.6	104.5
10 years	29.9	31.9	29.9	34.8	16.9	18.1	15.5	21.0	97.8	100.6	96.5	105.4
11 years	32.9	34.9	33.6	39.4	18.6	21.2	19.9	25.2	96.7	100.3	98.1	105.6
Boys												
6-11 years	25.5	26.2	25.0	29.1	12.1	13.4	12.5	15.4	99.4	101.0	99.7	106.0
6 years	16.7	16.6	16.0	18.6	5.1	5.7	5.7	6.6	99.3	100.5	99.5	105.6
7 years	20.4	20.1	19.3	22.9	7.6	8.4	8.3	10.0	100.1	101.4	100.1	106.8
8 years	25.2	23.9	23.4	27.0	11.8	10.8	12.0	13.5	101.6	99.1	99.9	105.5
9 years	28.2	28.9	27.9	30.7	12.5	13.8	13.8	16.0	99.6	101.7	100.3	105.5
10 years	30.7	32.3	31.6	36.0	17.2	18.6	15.5	21.4	98.6	101.4	98.1	106.7
11 years	33.0	35.7	34.7	39.1	19.4	23.1	21.8	25.0	97.3	102.1	100.3	106.2
Girls												
6-11 years	23.7	24.5	23.5	27.4	11.3	11.5	11.0	14.7	96.6	98.3	96.1	103.1
6 years	15.6	15.5	14.9	17.4	5.5	5.4	5.2	6.8	98.5	98.0	96.4	103.6
7 years	18.0	19.2	17.7	20.8	7.1	6.9	7.0	8.2	96.7	97.6	96.1	102.0
8 years	22.5	23.0	22.9	25.7	9.6	10.5	9.8	11.4	96.6	97.5	96.8	102.0
9 years	24.7	27.4	26.1	29.2	11.4	12.1	11.6	15.3	95.0	98.9	96.9	103.1
10 years	29.2	31.5	28.1	33.3	16.5	17.6	15.5	20.5	96.8	99.6	94.8	103.6
11 years	32.7	33.8	32.3	37.5	17.9	19.0	17.7	25.4	95.8	97.9	95.4	104.5

Table 21. Average raw scores on the Vocabulary and Block Design subtests and average deviation IQ's from the Wechsler Intelligence Scale for white and Negro children, by age, sex, and population change in place of residence from 1950 to 1960: United States, 1963-65

Age, race, and sex	Rate of population change											
	Loss	Below average gain	Average gain	Above average gain	Loss	Below average gain	Average gain	Above average gain	Loss	Below average gain	Average gain	Above average gain
White	Vocabulary raw score				Block Design raw score				Deviation IQ			
Both sexes 6-11 years	25.2	26.0	26.2	29.1	12.1	13.1	13.6	15.8	99.0	100.9	101.9	106.2
6 years	16.5	16.1	16.8	18.7	5.4	5.9	6.4	7.0	99.6	99.9	102.2	106.4
7 years	19.7	20.4	20.0	22.5	7.7	8.1	8.9	9.5	99.7	101.0	102.0	105.9
8 years	24.4	24.1	25.0	27.1	11.1	11.3	12.5	13.3	100.0	99.7	102.3	105.5
9 years	27.3	28.9	29.3	30.3	12.5	13.9	14.7	16.1	98.9	102.1	102.9	105.2
10 years	30.5	30.0	32.4	36.0	17.4	18.8	18.1	22.2	98.7	101.8	100.8	107.6
11 years	33.7	37.8	35.9	39.6	19.2	22.4	22.9	26.7	97.7	101.7	102.1	107.5
Boys 6-11 years	26.2	26.9	26.9	29.9	12.6	14.1	14.4	16.2	100.7	102.4	103.8	107.5
Girls 6-11 years	24.2	25.1	25.4	28.2	11.6	12.2	12.7	15.5	97.4	99.4	99.8	104.8
Negro												
Both sexes 6-11 years	13.9	21.2	19.0	21.4	4.5	7.8	6.7	7.9	80.3	90.9	87.1	90.4
6 years	10.1	15.3	11.9	12.7	2.5	3.5	2.9	3.5	82.6	94.0	87.0	89.6
7 years	12.5	13.8	14.9	15.2	3.2	4.0	4.8	5.0	85.3	86.8	88.9	88.6
8 years	13.9	20.5	18.0	20.5	4.0	7.1	6.3	6.0	80.6	91.0	87.4	90.5
9 years	14.5	23.7	20.6	26.7	4.3	7.2	6.9	10.1	76.6	90.2	86.4	96.8
10 years	17.4	25.0	24.1	25.5	7.7	12.4	9.3	12.0	81.4	89.7	86.8	89.0
11 years	18.2	30.0	26.6	27.7	7.1	14.0	11.0	10.9	76.9	91.3	85.7	87.6
Boys 6-11 years	13.5	21.8	19.4	22.2	3.9	8.6	6.6	8.6	78.4	91.2	87.5	92.6
Girls 6-11 years	14.4	20.5	18.5	20.6	5.2	7.0	6.8	7.2	82.2	90.6	86.6	87.9

Table 22. Average raw scores on the Vocabulary and Block Design subtests and average deviation IQ's from the Wechsler Intelligence Scale for Children, by age, sex, region, and population change in place of residence from 1950 to 1960: United States, 1963-65

Region, age, and sex	Rate of population change											
	Loss	Below average gain	Average gain	Above average gain	Loss	Below average gain	Average gain	Above average gain	Loss	Below average gain	Average gain	Above average gain
	Vocabulary raw score				Block Design raw score				Deviation IQ			
Northeast												
Both sexes 6-11 years	26.8	25.8	25.2	27.3	13.5	12.0	11.7	14.5	102.6	100.8	99.4	103.1
6 years	17.3	16.2	15.2	17.8	6.5	5.6	6.0	6.6	103.2	100.4	100.0	104.2
7 years	21.2	20.6	19.4	20.0	8.2	8.0	7.9	7.4	102.7	102.0	100.0	99.8
8 years	26.6	25.3	25.3	25.7	12.9	11.7	12.2	13.3	102.5	101.8	101.8	102.9
9 years	28.9	29.2	29.0	29.0	14.6	13.6	14.3	15.4	103.3	102.2	102.0	103.2
10 years	33.4	32.8	30.7	32.9	19.2	17.5	13.8	19.8	103.6	101.4	96.9	105.0
11 years	36.6	34.9	35.1	39.0	22.6	19.2	17.9	24.8	102.5	99.4	98.7	106.6
Boys 6-11 years	28.4	25.9	25.9	28.8	14.2	12.8	12.6	16.1	104.5	101.9	101.9	105.2
Girls 6-11 years	25.1	25.6	24.6	25.6	12.8	11.2	10.8	12.6	100.5	99.8	97.2	100.7
Midwest												
Both sexes 6-11 years	26.3	26.1	25.3	27.6	15.1	13.4	13.6	15.8	102.8	100.3	100.2	104.2
6 years	16.8	16.0	15.5	17.2	6.2	6.0	6.2	6.6	102.2	100.4	99.7	103.9
7 years	20.4	20.4	18.8	20.9	9.6	8.0	8.7	9.0	103.7	100.9	100.7	103.0
8 years	24.6	23.8	23.1	26.3	13.0	10.2	12.9	13.2	103.0	98.2	100.6	104.7
9 years	28.8	29.0	28.4	29.5	16.1	13.4	14.5	15.9	103.9	101.6	102.0	104.3
10 years	32.0	32.0	32.1	33.7	22.8	19.0	17.6	22.4	104.4	101.6	100.6	105.7
11 years	35.8	34.6	33.2	36.9	23.6	23.8	21.8	27.0	103.0	101.8	99.6	105.6
Boys 6-11 years	26.7	27.8	26.3	27.6	16.2	14.5	14.9	15.7	103.6	101.5	102.4	105.0
Girls 6-11 years	26.0	24.5	24.2	27.6	14.1	12.4	12.1	16.0	102.0	99.3	97.8	103.2
South												
Both sexes 6-11 years	19.8	24.6	21.9	28.6	7.3	11.6	8.5	14.2	88.0	98.5	92.5	103.9
6 years	13.3	17.2	15.0	17.4	3.6	5.9	4.2	6.6	91.0	101.9	95.3	104.2
7 years	14.8	18.1	17.4	22.8	4.8	6.4	5.5	9.4	89.3	96.9	93.6	106.9
8 years	18.6	20.9	20.9	26.2	6.7	8.4	8.2	10.8	89.4	93.4	92.8	102.8
9 years	21.3	27.8	23.7	30.4	7.6	11.4	8.5	13.8	87.2	99.3	91.5	104.3
10 years	23.4	31.4	25.4	34.8	9.3	19.6	10.2	20.0	86.1	101.0	88.6	105.4
11 years	26.8	35.6	31.6	37.6	11.2	22.4	16.4	22.0	86.8	102.0	94.0	103.3
Boys 6-11 years	20.4	25.3	22.3	30.3	7.5	12.1	8.5	14.4	89.3	101.1	93.3	106.1
Girls 6-11 years	19.1	24.1	21.4	27.0	7.1	11.2	8.5	14.0	86.8	96.1	91.6	101.8
West												
Both sexes 6-11 years	28.1	25.0	24.6	30.1	13.4	12.5	12.8	15.2	104.3	98.8	99.6	107.6
6 years	18.3	15.3	15.8	20.4	5.8	5.0	5.6	6.8	104.1	97.0	99.7	109.4
7 years	22.7	19.2	18.5	24.5	8.0	7.6	8.1	10.5	104.9	99.3	99.4	110.6
8 years	28.0	22.6	24.2	27.5	12.6	10.8	10.7	11.8	106.0	98.1	99.5	105.7
9 years	31.4	27.3	27.9	31.4	13.4	13.0	14.4	16.8	105.0	99.7	101.6	107.7
10 years	35.2	31.6	28.7	36.9	21.4	17.9	18.2	20.4	106.1	100.2	98.4	107.2
11 years	36.8	34.3	34.8	40.5	21.8	20.4	21.6	25.4	102.5	99.9	101.1	107.9
Boys 6-11 years	28.7	26.0	25.2	30.8	13.0	13.6	13.1	15.3	105.2	100.1	101.5	108.5
Girls 6-11 years	27.5	23.8	24.0	29.4	13.8	11.3	12.4	15.1	103.3	97.2	97.4	106.6

Table 23. Averages and standard deviations (SD) of raw scores on the Vocabulary subtest of the Wechsler Intelligence Scale for Children, by age, sex, and annual family income: United States, 1963-65

Age and sex	Annual family income											
	Less than $3,000		$3,000-$4,999		$5,000-$6,999		$7,000-$9,999		$10,000-$14,999		$15,000 or more	
	Average	SD	Average	SD	Average	SD	Average	SD	Average	SD	Average	SD
	Raw score											
Both sexes												
6-11 years	19.9	8.78	23.5	---	25.8	---	28.3	---	30.4	10.21	31.8	10.82
6 years	13.3	4.94	15.1	---	16.8	---	17.9	---	19.2	5.38	20.4	5.20
7 years	15.2	6.47	17.8	---	20.2	---	22.0	---	22.1	6.36	24.3	6.22
8 years	19.2	6.97	22.9	---	23.8	---	26.8	---	28.1	6.56	28.4	6.74
9 years	22.0	7.60	25.8	---	28.6	---	30.6	---	32.0	7.59	35.2	6.55
10 years	23.7	8.80	29.6	---	32.3	---	35.1	---	36.8	7.35	39.2	6.98
11 years	27.0	9.47	32.5	---	34.7	---	38.0	---	41.8	7.98	43.3	9.50
Boys												
6-11 years	20.6	9.05	24.1	---	26.4	---	29.2	---	31.6	10.64	32.2	10.69
6 years	13.7	---	15.2	---	17.2	---	18.2	---	19.6	---	22.6	---
7 years	16.5	---	18.4	---	21.3	---	22.2	---	25.5	---	23.6	---
8 years	20.3	---	23.5	---	24.1	---	27.5	---	29.1	---	29.6	---
9 years	22.8	---	26.7	---	29.7	---	30.9	---	32.4	---	36.4	---
10 years	25.0	---	30.4	---	32.8	---	36.0	---	38.4	---	39.2	---
11 years	26.8	---	33.1	---	35.5	---	38.2	---	43.2	---	43.1	---
Girls												
6-11 years	19.2	8.47	23.0	---	25.2	---	27.4	---	29.2	9.55	31.4	10.96
6 years	12.8	---	14.8	---	16.3	---	17.7	---	18.7	---	17.5	---
7 years	14.7	---	17.2	---	16.1	---	21.9	---	22.5	---	25.1	---
8 years	17.8	---	22.2	---	23.4	---	26.0	---	27.3	---	27.0	---
9 years	21.3	---	24.8	---	27.3	---	30.2	---	31.5	---	33.4	---
10 years	22.6	---	28.6	---	31.8	---	34.0	---	34.9	---	39.0	---
11 years	27.1	---	31.7	---	33.8	---	37.6	---	39.6	---	42.9	---

Table 24. Averages and standard deviations (SD) of raw scores on the Block Design subtest of the Wechsler Intelligence Scale for Children, by age, sex, and annual family income: United States, 1963-65

Age and sex	Annual family income											
	Less than $3,000		$3,000-$4,999		$5,000-$6,999		$7,000-$9,999		$10,000-$14,999		$15,000 or more	
	Average	SD	Average	SD	Average	SD	Average	SD	Average	SD	Average	SD
	Raw score											
Both sexes												
6-11 years	7.8	7.36	10.7	---	13.5	---	14.7	---	16.5	11.56	17.8	12.28
6 years	3.5	2.85	4.9	---	5.8	---	7.1	---	7.6	5.16	8.3	6.10
7 years	5.0	4.03	6.8	---	8.5	---	9.0	---	10.1	6.50	12.6	8.42
8 years	7.0	4.38	9.6	---	11.8	---	13.2	---	14.4	8.53	13.6	9.50
9 years	8.4	6.72	10.7	---	15.0	---	14.8	---	17.1	9.91	18.6	10.37
10 years	10.6	8.52	11.5	---	19.6	---	20.1	---	21.7	11.93	23.2	12.09
11 years	13.2	10.57	17.7	---	22.0	---	24.[illegible]	---	27.4	12.17	30.3	10.78
Boys												
6-11 years	8.1	7.55	11.0	---	13.8	---	15.7	---	17.3	11.94	18.4	12.09
6 years	3.2	---	4.5	---	5.9	---	7.0	---	8.0	---	9.0	---
7 years	5.1	---	7.0	---	9.4	---	10.0	---	10.4	---	11.9	---
8 years	7.5	---	9.6	---	12.2	---	14.4	---	15.8	---	16.6	---
9 years	7.5	---	11.0	---	15.9	---	14.9	---	18.9	---	20.4	---
10 years	11.7	---	16.1	---	19.2	---	20.5	---	21.8	---	22.9	---
11 years	14.4	---	19.4	---	22.4	---	26.3	---	27.7	---	30.3	---
Girls												
6-11 years	7.6	7.16	10.5	---	13.2	---	13.6	---	15.6	11.05	17.1	12.47
6 years	3.7	---	5.3	---	5.6	---	7.1	---	7.1	---	7.4	---
7 years	4.9	---	6.6	---	7.6	---	8.0	---	9.5	---	13.7	---
8 years	6.3	---	9.5	---	11.4	---	11.8	---	13.3	---	9.3	---
9 years	9.0	---	10.4	---	13.8	---	14.6	---	15.0	---	16.4	---
10 years	9.7	---	16.8	---	20.0	---	19.6	---	21.5	---	23.4	---
11 years	12.1	---	15.9	---	21.6	---	23.3	---	26.8	---	29.9	---

Table 25. Average raw scores on the Vocabulary and Block Design subtests of the Wechsler Intelligence Scale for white and Negro children, by age, sex, and annual family income: United States, 1963-65

Race, age, and sex	Annual family income					
	Less than $3,000	$3,000-$4,999	$5,000-$6,999	$7,000-$9,999	$10,000-$14,999	$15,000 or more
White	Vocabulary raw score					
Both sexes 6-11 years	21.0	24.6	26.4	28.5	30.5	31.7
6 years	13.8	15.9	17.2	18.1	19.2	20.4
7 years	17.2	18.6	20.5	22.3	24.4	24.3
8 years	20.0	24.0	24.5	27.0	28.2	28.7
9 years	23.0	26.9	29.5	30.7	32.2	35.2
10 years	25.0	30.9	32.9	35.4	36.9	39.1
11 years	28.6	33.4	35.6	38.5	41.8	43.0
Boys 6-11 years	21.9	25.2	27.0	29.4	31.6	32.2
Girls 6-11 years	20.3	24.0	25.6	27.5	29.3	31.2
Negro						
Both sexes 6-11 years	17.6	19.6	20.1	24.4	24.6	-
6 years	12.2	12.6	10.8	16.7	*	-
7 years	12.7	14.1	17.5	19.2	*	-
8 years	17.7	19.2	18.0	23.1	26.7	-
9 years	19.8	19.3	20.9	36.4	-	-
10 years	21.0	25.0	26.2	29.3	*	-
11 years	24.1	28.5	27.3	31.3	-	-
Boys 6-11 years	18.0	20.2	19.8	24.1	28.5	-
Girls 6-11 years	17.1	18.9	20.4	25.0	19.5	-
White	Block Design raw score					
Both sexes 6-11 years	8.7	11.7	14.1	15.0	16.6	17.7
6 years	4.0	5.3	5.9	7.2	7.6	8.3
7 years	5.6	7.4	8.8	9.2	10.2	12.6
8 years	7.7	10.6	12.5	13.4	14.5	12.9
9 years	9.4	11.8	15.6	15.1	17.1	18.6
10 years	11.4	18.2	20.4	20.5	21.9	23.2
11 years	15.3	18.7	23.1	25.6	27.4	30.2
Boys 6-11 years	9.0	12.1	14.3	16.1	17.4	18.2
Girls 6-11 years	8.4	11.4	13.8	13.8	15.6	17.0
Negro						
Both sexes 6-11 years	6.0	7.0	8.3	8.8	8.5	-
6 years	2.6	3.3	4.1	4.6	*	-
7 years	3.9	4.1	6.0	5.2	*	-
8 years	5.5	6.3	6.8	7.4	11.9	-
9 years	6.1	6.0	9.6	10.7	-	-
10 years	9.1	9.9	11.3	13.3	*	-
11 years	9.3	13.8	11.9	14.5	-	-
Boys 6-11 years	6.1	7.1	8.2	9.2	9.1	-
Girls 6-11 years	5.8	6.9	8.3	8.3	7.7	-

Table 26. Average Vocabulary and Block Design raw scores on the Wechsler Intelligence Scale for Children, by age, sex, region, and annual family income: United States, 1963-65

Region, age, and sex	Annual family income					
	Less than $3,000	$3,000-$4,999	$5,000-$6,999	$7,000-$9,999	$10,000-$14,999	$15,000 or more
	Vocabulary raw score					
Northeast						
Both sexes 6-11 years	21.8	23.6	24.9	27.7	28.7	34.5
6 years	15.0	14.9	16.0	17.2	18.0	21.6
7 years	15.2	16.2	20.2	22.5	21.6	27.4
8 years	20.6	23.9	23.2	27.3	27.6	31.6
9 years	25.6	25.4	27.1	31.1	31.0	35.0
10 years	29.0	29.0	30.2	36.1	35.9	42.6
11 years	28.5	31.3	34.6	39.0	43.5	45.0
Boys 6-11 years	23.0	23.8	25.6	29.2	30.2	33.7
Girls 6-11 years	21.0	23.3	24.2	26.1	27.1	35.2
Midwest						
Both sexes 6-11 years	22.6	24.2	25.5	27.6	29.8	29.3
6 years	13.4	15.3	16.6	17.5	17.9	18.7
7 years	17.8	18.4	19.4	21.1	23.7	21.2
8 years	21.0	23.3	23.4	25.8	27.8	23.5
9 years	24.6	27.1	28.2	30.4	31.1	32.8
10 years	26.6	29.8	32.6	33.6	35.7	37.6
11 years	31.2	33.6	33.2	36.8	39.0	38.4
Boys 6-11 years	23.0	24.9	26.3	27.8	30.8	31.4
Girls 6-11 years	22.2	23.5	24.6	27.4	28.8	26.1
South						
Both sexes 6-11 years	18.7	22.5	25.4	28.1	31.7	30.6
6 years	13.2	13.6	16.3	18.3	18.2	20.4
7 years	13.8	17.4	19.2	22.2	26.6	29.8
8 years	17.9	20.8	23.0	24.6	27.5	26.3
9 years	20.1	24.3	28.7	28.0	35.0	37.2
10 years	22.4	26.9	31.8	35.2	38.1	40.2
11 years	24.9	32.2	34.4	27.0	44.6	44.2
Boys 6-11 years	19.2	23.4	25.9	28.9	32.6	31.4
Girls 6-11 years	18.1	21.4	24.8	27.4	30.6	29.7
West						
Both sexes 6-11 years	20.2	23.9	27.4	30.0	32.6	32.7
6 years	12.8	15.8	18.2	19.8	22.6	20.4
7 years	1[illegible]	18.8	22.0	23.2	25.2	24.9
8 years	1[illegible]	23.8	25.0	27.8	30.4	29.8
9 years	2[illegible]	26.4	31.3	31.1	34.2	37.6
10 years	22.8	31.5	34.6	36.0	38.2	40.4
11 years	28.8	32.6	37.2	38.7	42.2	46.2
Boys 6-11 years	21.4	24.2	27.5	30.9	33.7	32.4
Girls 6-11 years	18.9	23.5	27.3	28.9	31.4	33.1

Table 26. Average Vocabulary and Block Design raw scores on the Wechsler Intelligence Scale for Children, by age, sex, region, and annual family income: United States, 1963-65—Con.

Region, age, and sex	Annual family income					
	Less than $3,000	$3,000-$4,999	$5,000-$6,999	$7,000-$9,999	$10,000-$14,999	$15,000 or more
	Block Design raw score					
Northeast						
Both sexes 6-11 years	9.6	10.3	12.3	14.0	14.9	17.3
6 years	4.4	4.9	4.9	7.8	6.6	7.6
7 years	5.8	6.2	7.8	9.0	8.4	14.1
8 years	9.8	9.4	11.4	14.2	13.5	13.8
9 years	12.4	10.7	14.4	15.6	15.9	13.2
10 years	14.8	14.7	16.3	19.2	22.8	22.8
11 years	11.7	15.4	19.9	23.7	27.8	30.0
Boys 6-11 years	11.6	10.6	12.9	15.6	16.2	17.3
Girls 6-11 years	8.3	10.1	11.6	12.3	13.5	17.4
Midwest						
Both sexes 6-11 years	12.3	12.3	14.5	15.0	17.2	18.0
6 years	4.2	5.6	6.3	6.6	7.7	7.1
7 years	7.0	7.8	9.2	9.1	10.6	12.0
8 years	8.4	10.6	13.4	12.6	17.0	9.9
9 years	12.8	12.3	15.4	14.2	16.6	22.3
10 years	16.8	18.4	20.8	21.2	20.4	21.2
11 years	23.6	21.1	21.8	26.6	27.4	28.6
Boys 6-11 years	12.3	13.2	14.8	15.9	18.4	19.2
Girls 6-11 years	12.3	11.4	14.1	14.1	15.9	16.1
South						
Both sexes 6-11 years	6.1	9.0	12.5	14.4	16.1	16.8
6 years	3.2	4.0	5.2	7.1	6.1	9.0
7 years	4.1	5.2	7.2	9.9	10.8	12.8
8 years	5.6	7.6	10.1	11.2	12.0	13.0
9 years	6.5	8.2	13.4	11.5	18.4	21.1
10 years	7.9	12.9	17.6	21.4	21.6	26.8
11 years	9.8	17.7	22.0	23.7	29.0	28.4
Boys 6-11 years	6.1	8.7	12.2	15.8	16.2	17.1
Girls 6-11 years	6.1	9.3	12.7	13.3	16.0	16.4
West						
Both sexes 6-11 years	7.9	11.2	14.5	15.0	17.2	19.3
6 years	3.4	5.1	6.4	6.7	8.8	7.0
7 years	5.8	7.8	9.4	8.5	10.4	12.4
8 years	7.0	10.2	11.6	13.1	12.8	13.8
9 years	9.1	11.6	16.2	16.2	18.9	20.6
10 years	10.4	19.8	22.8	18.8	22.5	25.6
11 years	15.2	17.0	24.6	24.0	26.0	34.0
Boys 6-11 years	8.4	11.4	14.7	15.5	17.3	19.8
Girls 6-11 years	7.3	10.9	14.4	14.5	17.0	18.7

Table 27. Average deviation IQ's on the Wechsler Intelligence Scale for Children, by age, sex, and annual family income: United States, 1963-65

Age and sex	Annual family income					
	Less than $3,000	$3,000-$4,999	$5,000-$6,999	$7,000-$9,999	$10,000-$14,999	$15,000 or more
Both sexes	Deviation IQ					
6-11 years	89.2	96.1	101.1	104.7	108.4	111.2
6 years	90.8	96.6	100.9	105.1	108.4	112.4
7 years	90.5	96.0	101.7	104.5	108.9	113.2
8 years	89.7	96.7	99.9	104.8	108.6	108.4
9 years	89.5	95.5	102.2	104.7	107.8	112.5
10 years	87.6	97.3	102.1	104.9	107.5	111.2
11 years	87.8	95.7	100.5	105.1	110.4	112.7
Boys						
6-11 years	90.3	96.9	102.4	105.9	110.4	113.5
6 years	90.8	96.1	101.6	105.4	110.1	117.7
7 years	91.7	96.9	104.1	106.0	111.2	110.9
8 years	91.2	97.1	100.8	106.7	111.5	112.4
9 years	89.6	96.6	104.0	105.1	109.6	115.5
10 years	89.7	97.6	102.1	105.8	109.0	111.5
11 years	88.4	97.4	101.6	106.4	111.6	112.5
Girls						
6-11 years	88.2	95.3	99.7	103.5	106.1	108.4
6 years	90.5	96.8	99.7	104.8	105.8	105.0
7 years	89.2	94.9	98.9	103.0	105.4	115.5
8 years	87.4	95.9	99.0	102.2	106.0	101.8
9 years	89.3	94.3	99.8	104.0	105.5	108.1
10 years	85.7	96.4	101.9	103.6	105.5	110.4
11 years	87.1	93.6	99.2	103.5	108.3	111.5

Table 28. Average deviation IQ's on the Wechsler Intelligence Scale for white and Negro children, by age, sex, and annual family income: United States, 1963-65

Race, age, and sex	Annual family income					
	Less than $3,000	$3,000-$4,999	$5,000-$6,999	$7,000-$9,999	$10,000-$14,999	$15,000 or more
	Deviation IQ					
White						
Both sexes 6-11 years	91.4	98.2	102.3	105.3	108.5	111.0
6 years	92.6	98.6	101.7	105.8	108.5	112.4
7 years	93.4	97.9	102.5	105.2	109.3	113.2
8 years	91.3	98.9	101.3	105.1	108.8	107.8
9 years	91.5	97.9	103.6	105.1	108.1	112.5
10 years	89.3	99.6	103.3	105.5	107.7	111.0
11 years	90.7	97.1	101.9	106.0	110.4	112.2
Boys 6-11 years	92.8	99.2	103.6	106.6	110.6	113.2
Girls 6-11 years	90.1	97.1	100.8	103.9	106.2	108.3
Negro						
Both sexes 6-11 years	85.0	88.4	89.3	94.7	98.9	-
6 years	87.7	90.4	87.2	98.0	*	-
7 years	85.3	88.2	94.7	95.8	*	-
8 years	86.2	89.3	89.2	95.3	100.9	-
9 years	85.3	87.8	90.3	98.1	-	-
10 years	84.2	88.7	90.5	93.9	*	-
11 years	82.9	89.8	88.6	94.4	-	-
Boys 6-11 years	85.4	88.7	89.4	94.3	102.0	-
Girls 6-11 years	84.6	88.2	89.2	95.1	94.9	-

Table 29. Average deviation IQ's on the Wechsler Intelligence Scale for Children, by age, sex, region, and annual family income: United States, 1963-65

Region, age, and sex	Annual family income					
	Less than $3,000	$3,000-$4,999	$5,000-$6,999	$7,000-$9,999	$10,000-$14,999	$15,000 or more
	Deviation IQ					
Northeast						
Both sexes 6-11 years	93.4	94.8	99.0	105.5	106.4	112.5
6 years	95.8	96.4	98.2	10[illegible]	105.3	118.3
7 years	92.5	94.3	100.9	104.7	105.2	122.2
8 years	95.7	97.5	98.7	106.9	107.0	113.2
9 years	98.0	95.0	100.9	106.1	106.5	106.6
10 years	96.0	96.1	98.6	106.1	108.4	115.5
11 years	90.0	94.0	99.6	105.6	111.6	115.4
Boys 6-11 years	94.7	96.2	100.1	107.2	108.4	115.6
Girls 6-11 years	92.6	93.3	98.0	103.7	104.1	109.6
Midwest						
Both sexes 6-11 years	95.4	98.2	101.2	103.9	107.3	107.8
6 years	93.0	98.0	101.3	103.6	108.0	106.5
7 years	97.1	98.3	101.6	104.0	108.1	109.0
8 years	94.9	98.4	101.8	103.6	110.6	101.2
9 years	98.4	98.8	102.4	103.8	106.2	112.6
10 years	95.8	99.1	103.7	104.6	106.2	111.0
11 years	99.1	99.7	99.3	105.6	108.8	110.0
Boys 6-11 years	95.4	99.0	103.0	104.6	110.1	108.9
Girls 6-11 years	95.4	97.3	99.3	103.2	104.3	106.2
South						
Both sexes 6-11 years	86.1	92.7	99.3	103.1	111.0	112.6
6 years	89.9	92.9	100.8	105.6	111.6	114.7
7 years	86.9	93.4	99.0	105.7	115.4	139.2
8 years	87.5	92.9	98.2	101.7	107.0	108.8
9 years	85.5	91.9	100.4	99.6	115.2	122.9
10 years	84.1	92.2	100.7	105.6	111.2	122.8
11 years	83.6	95.3	100.4	104.4	114.4	115.8
Boys 6-11 years	87.6	92.6	100.8	104.2	113.1	116.8
Girls 6-11 years	84.8	92.8	97.6	102.3	108.6	107.7
West						
Both sexes 6-11 years	90.8	98.3	104.5	106.0	110.8	112.9
6 years	90.6	99.0	104.8	108.0	115.8	115.0
7 years	95.2	99.0	106.1	106.5	111.8	115.7
8 years	89.9	99.4	102.0	106.5	110.9	113.1
9 years	94.0	97.6	106.4	107.5	112.9	119.1
10 years	87.5	101.9	106.7	105.7	110.1	112.6
11 years	92.2	95.3	104.9	105.6	111.4	121.6
Boys 6-11 years	91.6	100.0	103.4	107.0	111.7	115.2
Girls 6-11 years	89.9	96.8	103.6	104.8	109.7	110.0

Table 30. Average Vocabulary raw scores on the Wechsler Intelligence Scale for Children, by age, sex, and education of parent: United States, 1963-65

Age and sex	Years of schooling completed[1]							
	Less than 5 years	5-7 years	8 years	9-11 years	12 years	13-15 years	16 years	17 years or more
	Vocabulary raw score							
Both sexes								
6-11 years	17.5	21.1	24.4	24.3	27.0	28.9	30.9	32.1
6 years	16.0	12.9	15.0	15.3	17.4	19.4	20.0	19.9
7 years	13.3	15.7	18.3	18.6	20.8	23.5	24.1	25.9
8 years	15.2	19.6	23.1	23.6	25.7	27.2	29.1	29.4
9 years	18.6	23.4	26.4	27.1	29.3	32.0	35.1	33.7
10 years	21.1	25.3	29.5	30.0	33.9	36.6	37.0	40.1
11 years	24.5	28.3	31.5	33.9	37.6	41.0	42.0	42.8
Boys								
6-11 years	18.2	22.0	25.1	25.0	27.6	30.1	32.0	32.9
6 years	11.2	14.0	15.3	15.9	17.8	20.6	20.6	20.0
7 years	14.3	17.0	19.4	19.2	21.4	24.6	25.5	25.7
8 years	15.6	20.1	23.1	24.3	25.9	27.3	30.5	30.7
9 years	18.9	24.4	27.9	27.8	30.4	32.3	36.3	32.8
10 years	22.2	26.9	30.2	31.8	34.5	36.3	38.3	40.6
11 years	25.5	28.7	30.8	34.1	38.9	41.1	42.5	43.5
Girls								
6-11 years	16.8	20.2	23.7	23.6	26.4	27.7	29.8	31.2
6 years	11.9	11.3	14.7	14.5	16.9	18.5	18.9	19.7
7 years	12.0	14.4	17.2	17.9	20.3	21.9	22.4	25.7
8 years	14.6	19.2	22.9	22.8	25.3	27.0	27.6	27.6
9 years	18.2	22.0	24.6	26.2	28.3	31.3	33.0	33.9
10 years	20.1	23.4	28.5	28.5	33.2	36.7	35.2	39.1
11 years	23.0	27.8	32.0	33.6	32.2	40.5	41.4	41.3

[1] The father or if he is not in the home, the mother or guardian.

Table 31. Average Block Design raw scores on the Wechsler Intelligence Scale for Children, by age, sex, and education of parent: United States, 1963-65

Age and sex	Years of schooling completed[1]							
	Less than 5 years	5-7 years	8 years	9-11 years	12 years	13-15 years	16 years	17 years or more
	Block Design raw score							
Both sexes								
6-11 years	6.6	8.3	11.7	11.2	13.2	14.7	15.2	17.5
6 years	3.3	3.5	5.1	4.9	6.2	7.6	7.8	8.3
7 years	4.1	5.2	6.5	7.4	8.7	11.0	8.9	12.0
8 years	6.0	8.3	10.3	10.6	12.2	14.0	12.8	15.7
9 years	6.1	8.6	12.5	12.0	14.4	17.5	20.7	19.2
10 years	8.7	12.1	15.9	15.9	20.9	22.3	21.5	24.8
11 years	11.7	14.2	18.6	21.0	22.6	28.3	28.4	29.1
Boys								
6-11 years	6.8	9.3	12.1	12.1	14.3	17.0	17.6	19.1
6 years	2.9	3.8	4.6	4.5	6.4	9.6	8.2	7.2
7 years	4.2	5.4	7.0	7.6	9.4	12.8	9.8	12.6
8 years	6.3	7.7	9.3	11.4	13.3	13.9	14.3	19.1
9 years	5.8	9.0	12.8	12.7	15.2	17.8	21.5	19.4
10 years	8.5	13.2	15.8	17.5	19.8	23.2	22.0	25.1
11 years	12.1	16.4	19.6	21.5	24.2	25.6	31.9	27.9
Girls								
6-11 years	6.6	8.3	11.7	11.2	13.2	14.7	15.2	17.5
6 years	3.7	3.0	5.4	5.3	6.0	6.4	7.3	9.8
7 years	4.0	5.0	6.0	7.2	8.1	8.6	7.9	11.4
8 years	5.7	8.8	11.0	9.7	10.6	14.0	11.4	11.9
9 years	6.3	7.9	12.2	11.3	13.5	16.9	19.3	18.8
10 years	8.4	10.8	15.9	14.4	21.9	21.2	20.7	24.3
11 years	11.2	12.3	17.6	20.5	21.0	31.9	25.0	31.1

[1] The father or if he is not in the home, the mother or guardian.

Table 32. Average Vocabulary and Block Design raw scores on the Wechsler Intelligence Scale for white children, by age, sex, and education of parent: United States, 1963-65

Age and sex	Years of schooling completed[1]							
	Less than 5 years	5-7 years	8 years	9-11 years	12 years	13-15 years	16 years	17 years or more
Both sexes	Vocabulary raw score							
6-11 years	17.8	22.2	25.4	25.3	27.5	29.2	31.1	32.1
6 years	11.4	13.4	15.8	15.9	17.6	19.4	20.0	20.0
7 years	14.1	17.0	18.9	19.4	21.3	23.9	24.2	25.9
8 years	15.1	20.5	23.8	24.7	26.2	27.7	29.3	29.5
9 years	18.6	24.3	27.6	28.1	29.7	32.3	35.2	33.7
10 years	21.2	27.4	30.4	31.8	34.5	36.9	37.3	40.3
11 years	25.5	30.4	58.5	35.0	38.0	47.7	42.3	43.0
Boys 6-11 years	18.9	23.3	25.7	26.2	28.1	30.5	32.2	33.0
Girls 6-11 years	16.8	21.2	25.0	24.4	26.8	27.9	30.0	31.2
Both sexes	Block Design raw score							
6-11 years	7.4	9.9	12.6	12.7	14.3	16.1	16.7	18.4
6 years	4.1	3.9	5.2	5.4	6.4	7.7	11.8	8.3
7 years	4.4	5.9	6.8	7.9	9.2	11.3	9.1	12.3
8 years	6.7	9.8	10.8	11.6	12.7	14.3	13.1	15.4
9 years	6.7	9.5	13.4	12.9	14.8	17.7	20.6	19.1
10 years	8.8	13.7	16.7	17.7	21.4	22.7	21.4	25.3
11 years	12.7	16.1	19.5	22.8	23.5	28.7	28.5	29.4
Boys 6-11 years	7.7	10.6	12.5	13.3	14.8	17.2	17.9	19.0
Girls 6-11 years	7.0	9.1	12.6	12.0	13.8	15.0	15.4	17.7

[1]The father or if he is not in the home, the mother or guardian.

Table 33. Average Vocabulary and Block Design raw scores on the Wechsler Intelligence Scale for Negro children, by age, sex, and education of parent: United States, 1963-65

Age and sex	Years of schooling completed[1]							
	Less than 5 years	5-7 years	8 years	9-11 years	12 years	13-15 years	16 years	17 years or more
Both sexes	Vocabulary raw score							
6-11 years	16.5	19.0	17.3	19.5	22.0	22.8	25.1	27.5
6 years	12.3	12.0	11.4	12.2	15.1	16.5	*	-
7 years	11.7	13.0	13.7	15.1	16.1	16.1	22.9	*
8 years	11.3	18.3	17.4	18.7	21.1	22.5	24.5	34.3
9 years	18.7	21.2	19.9	21.9	24.9	25.3	*	*
10 years	21.2	22.0	20.6	23.6	28.2	34.4	*	*
11 years	22.2	25.3	23.2	28.7	32.6	*	*	*
Boys 6-11 years	16.3	19.9	19.7	19.1	21.8	22.9	27.8	30.1
Girls 6-11 years	16.7	17.9	15.8	19.8	22.3	22.7	20.3	26.6
Both sexes	Block Design raw score							
6-11 years	4.9	6.8	6.8	7.0	8.2	10.2	8.4	9.1
6 years	1.6	2.8	4.8	2.6	4.2	3.6	*	-
7 years	3.4	3.9	4.0	5.4	4.8	6.5	5.2	*
8 years	3.8	5.8	6.3	6.2	7.4	10.0	6.9	5.5
9 years	5.0	5.6	7.2	7.6	8.8	11.8	*	*
10 years	7.5	9.4	8.3	9.2	15.2	18.1	*	*
11 years	9.4	11.6	10.6	12.5	11.4	*	*	*
Boys 6-11 years	4.5	7.1	8.0	6.4	8.6	12.4	9.5	10.2
Girls 6-11 years	5.3	6.5	6.0	7.5	7.7	6.7	6.5	8.7

[1]The father or if he is not in the home, the mother or guardian.

Table 34. Average Vocabulary and Block Design raw scores on the Wechsler Intelligence Scale for Children in the Northeast by age, sex, and education of parent: United States, 1963-65

Age and sex	Years of schooling completed[1]							
	Less than 5 years	5-7 years	8 years	9-11 years	12 years	13-15 years	16 years	17 years or more
Both sexes	Vocabulary raw score							
6-11 years	19.0	22.1	24.2	25.1	26.8	28.2	29.2	31.9
6 years	9.7	14.2	15.7	15.6	16.9	18.0	19.3	17.6
7 years	10.6	15.8	18.1	19.1	21.0	23.4	24.1	25.0
8 years	12.2	20.4	23.0	24.3	25.5	28.7	28.0	30.8
9 years	20.2	20.8	26.3	27.4	29.4	33.6	33.6	36.6
10 years	25.4	25.4	28.8	30.9	34.0	36.9	35.5	41.4
11 years	29.2	29.7	30.0	35.8	37.8	40.6	41.3	44.2
Boys 6-11 years	19.1	22.2	24.6	26.1	28.6	29.3	30.2	31.5
Girls 6-11 years	18.7	22.0	23.8	24.1	24.9	27.3	28.0	32.2
Both sexes	Block Design raw score							
6-11 years	7.2	9.5	11.5	12.3	13.4	15.2	13.6	16.7
6 years	2.4	4.4	4.8	4.8	7.0	8.4	7.4	7.1
7 years	2.8	4.8	7.0	7.8	7.8	9.4	8.6	14.6
8 years	5.4	7.1	10.0	12.6	13.2	14.5	10.8	14.8
9 years	7.8	8.4	11.6	13.7	14.8	23.0	18.0	16.0
10 years	7.6	13.6	16.6	16.2	18.9	20.4	18.2	23.0
11 years	13.8	15.8	16.3	20.7	21.8	27.9	23.6	30.7
Boys 6-11 years	6.4	10.5	11.7	13.1	15.2	17.3	14.8	16.5
Girls 6-11 years	8.6	8.6	11.2	11.6	11.5	13.7	12.3	17.0

[1]The father or if he is not in the home, the mother or guardian.

Table 35. Average Vocabulary and Block Design raw scores on the Wechsler Intelligence Scale for Children in the Midwest by age, sex, and education of parent: United States, 1963-65

Age and sex	Years of schooling completed[1]							
	Less than 5 years	5-7 years	8 years	9-11 years	12 years	13-15 years	16 years	17 years or more
Both sexes	Vocabulary raw score							
6-11 years	14.8	20.8	25.4	24.1	26.5	27.1	27.5	29.3
6 years	12.8	15.1	15.7	15.3	16.8	18.6	17.2	20.0
7 years	14.9	16.5	19.2	18.4	20.0	22.0	23.6	23.6
8 years	22.0	23.3	23.0	23.7	25.3	23.8	28.4	27.2
9 years	13.8	25.6	27.4	27.6	28.8	28.8	32.6	33.1
10 years	*	27.2	30.5	29.8	33.8	35.0	34.4	37.6
11 years	19.6	30.9	32.7	32.1	36.5	41.4	40.6	40.5
Boys 6-11 years	16.3	26.6	25.2	24.5	26.9	30.3	31.6	34.4
Girls 6-11 years	14.8	20.8	25.4	24.1	26.5	27.1	27.5	29.3
Both sexes	Block Design raw score							
6-11 years	7.5	13.2	14.1	12.4	14.5	17.1	17.8	20.6
6 years	2.6	5.4	6.2	6.4	6.0	7.7	8.0	10.0
7 years	4.6	5.4	7.6	8.0	10.0	8.8	9.9	17.5
8 years	16.0	13.0	11.2	9.8	13.0	14.8	15.6	12.8
9 years	6.0	5.5	15.2	12.0	14.5	18.7	21.2	20.9
10 years	*	17.4	18.4	17.6	21.1	21.6	21.2	23.2
11 years	19.4	22.4	22.5	21.2	23.2	32.7	30.3	33.4
Boys 6-11 years	10.9	14.8	14.3	12.4	14.8	18.6	20.1	23.8
Girls 6-11 years	6.2	11.4	13.8	12.4	14.2	15.5	15.2	16.2

[1]The father or if he is not in the home, the mother or guardian.

Table 36. Average Vocabulary and Block Design raw scores on the Wechsler Intelligence Scale for Children in the South by age, sex, and education of parent: United States, 1963-65

Age and sex	Years of schooling completed[1]							
	Less than 5 years	5-7 years	8 years	9-11 years	12 years	13-15 years	16 years	17 years or more
Both sexes	Vocabulary raw score							
6-11 years	17.6	20.0	21.7	23.2	26.0	27.3	32.2	30.8
6 years	12.4	11.6	14.9	15.0	15.9	19.3	21.0	21.2
7 years	12.8	15.0	14.7	17.6	20.2	24.0	22.6	29.4
8 years	15.2	18.2	22.7	21.1	24.2	23.8	31.8	29.0
9 years	18.4	22.4	22.4	24.8	28.2	28.7	37.0	31.4
10 years	21.8	24.0	27.6	29.6	30.8	37.9	46.8	39.4
11 years	23.5	26.2	29.2	34.0	38.0	36.0	41.0	42.4
Boys 6-11 years	18.4	20.5	23.8	24.3	25.8	28.1	33.1	32.1
Girls 6-11 years	16.8	19.5	20.1	22.2	26.2	26.5	31.5	29.4
Both sexes	Block Design raw score							
6-11 years	6.0	7.5	9.0	9.7	11.7	13.9	17.1	15.5
6 years	3.2	2.8	4.4	3.8	5.3	7.6	8.4	7.8
7 years	3.9	4.8	4.8	5.4	7.6	11.8	8.6	10.0
8 years	4.8	6.8	8.3	8.1	8.6	13.1	14.0	15.0
9 years	5.6	7.2	10.5	8.7	11.6	10.8	20.9	13.8
10 years	8.0	10.2	11.7	13.8	16.6	26.2	23.1	27.0
11 years	9.9	12.2	15.1	20.4	22.1	19.2	25.6	25.2
Boys 6-11 years	6.2	7.8	10.4	10.0	10.8	14.3	18.1	15.3
Girls 6-11 years	5.9	7.3	8.0	9.4	12.7	13.4	16.3	15.7

[1] The father or if he is not in the home, the mother or guardian.

Table 37. Average Vocabulary and Block Design raw scores on the Wechsler Intelligence Scale for Children in the West by age, sex, and education of parent: United States, 1963-65

Age and sex	Years of schooling completed[1]							
	Less than 5 years	5-7 years	8 years	9-11 years	12 years	13-15 years	16 years	17 years or more
Both sexes	Vocabulary raw score							
6-11 years	17.3	21.3	25.7	24.4	28.2	30.4	32.7	33.5
6 years	10.4	12.9	14.4	14.8	19.2	21.4	21.4	22.6
7 years	14.2	17.0	20.5	19.3	22.0	24.4	25.4	24.2
8 years	15.0	19.9	23.6	25.2	26.8	29.0	30.2	30.4
9 years	18.8	27.1	29.5	27.6	31.0	31.8	36.9	31.3
10 years	19.9	27.4	30.8	30.4	35.1	37.7	37.4	42.2
11 years	26.0	30.2	32.4	33.8	38.4	42.0	42.8	41.8
Boys 6-11 years	17.6	22.5	26.5	25.0	28.8	31.3	33.1	34.1
Girls 6-11 years	16.9	19.9	24.8	23.7	27.6	29.3	32.2	32.8
Both sexes	Block Design raw score							
6-11 years	7.6	8.6	11.2	11.6	14.4	16.0	17.5	21.2
6 years	3.3	3.2	4.2	3.8	6.4	8.2	7.7	10.9
7 years	5.0	6.6	5.6	7.8	8.9	13.2	8.2	9.9
8 years	6.6	9.0	9.6	11.2	11.6	13.0	12.0	19.2
9 years	6.4	12.6	12.4	12.6	15.5	15.3	22.3	24.3
10 years	9.8	11.4	16.0	15.8	23.4	22.4	22.2	24.0
11 years	14.6	12.6	17.3	21.5	22.9	29.2	30.0	29.1
Boys 6-11 years	7.5	8.2	10.2	12.4	14.9	16.4	17.8	21.4
Girls 6-11 years	7.7	9.0	12.3	10.6	13.9	15.6	16.9	21.1

[1] The father or if he is not in the home, the mother or guardian.

Table 38. Average deviation IQ's on the Wechsler Intelligence Scale for Children, by age, sex, and education of parent: United States, 1963-65

Age and sex	Years of schooling completed[1]							
	Less than 5 years	5-7 years	8 years	9-11 years	12 years	13-15 years	16 years	17 years or more
	Deviation IQ							
Both sexes								
6-11 years	85.0	90.5	96.3	97.7	102.9	108.0	109.6	111.9
6 years	87.9	90.3	96.9	96.6	102.8	108.0	110.5	111.4
7 years	86.7	90.8	96.6	97.8	102.5	109.6	107.0	115.1
8 years	84.8	92.0	97.3	98.4	102.5	106.4	107.9	111.7
9 years	84.4	90.9	98.0	98.2	102.7	108.8	114.6	112.0
10 years	83.5	90.3	96.5	97.1	104.5	108.5	107.9	112.9
11 years	84.6	89.9	95.3	99.1	103.4	109.7	111.1	112.2
Boys								
6-11 years	85.8	92.0	97.3	98.9	104.3	109.9	112.3	112.9
6 years	86.7	92.4	96.8	96.9	103.8	112.6	112.6	109.6
7 years	88.1	92.5	98.4	98.5	104.1	113.4	110.0	116.0
8 years	85.1	91.4	95.8	99.5	104.0	106.4	111.4	116.9
9 years	84.0	92.1	99.7	99.4	104.4	109.0	116.3	110.6
10 years	84.8	92.4	97.0	99.9	104.1	108.8	109.2	113.4
11 years	85.5	91.0	95.9	99.7	105.6	108.0	113.5	112.2
Girls								
6-11 years	84.2	88.8	95.7	96.5	101.5	106.2	106.4	110.7
6 years	88.6	86.4	96.5	95.9	101.6	104.7	107.3	113.2
7 years	84.2	88.6	94.6	96.8	100.9	103.7	102.9	112.7
8 years	83.7	92.0	97.9	97.0	100.2	105.6	104.1	104.9
9 years	83.8	88.7	95.5	96.6	100.9	107.1	111.3	111.5
10 years	81.9	87.5	95.5	94.6	104.6	107.5	105.2	111.2
11 years	83.2	88.4	94.4	98.2	100.9	111.4	108.6	111.7

[1]The father or if he is not in the home, the mother or guardian.

Table 39. Average deviation IQ's on the Wechsler Intelligence Scale for white and Negro children, by age, sex, and education of parent: United States, 1963-65

Race, age, and sex	Years of schooling completed[1]							
	Less than 5 years	5-7 years	8 years	9-11 years	12 years	13-15 years	16 years	17 years or more
	Deviation IQ							
White								
Both sexes 6-11 years	85.8	92.9	97.9	99.8	103.9	108.7	110.0	112.0
6 years	89.2	92.2	98.0	98.5	103.6	108.2	110.7	111.4
7 years	88.6	93.7	97.7	99.6	103.8	110.4	107.2	115.6
8 years	85.7	94.6	98.7	100.5	103.7	107.2	108.6	111.3
9 years	84.8	92.7	100.1	100.1	103.5	109.1	114.9	111.7
10 years	83.8	93.7	97.9	100.1	105.3	109.0	108.5	113.3
11 years	86.5	93.0	96.8	101.2	104.3	110.4	111.6	112.9
Boys 6-11 years	86.8	95.4	98.3	101.0	105.4	110.7	112.9	112.8
Girls 6-11 years	84.7	90.5	97.6	98.5	102.3	106.6	106.6	111.1
Negro								
Both sexes 6-11 years	83.0	85.8	86.2	88.2	92.6	95.0	97.8	96.6
6 years	87.0	86.9	91.5	88.4	96.0	102.7	*	-
7 years	83.5	85.3	91.0	90.3	90.8	90.6	100.8	*
8 years	83.2	88.2	87.3	88.7	91.3	96.2	94.9	95.5
9 years	83.7	85.7	86.6	88.7	93.6	92.4	*	*
10 years	83.7	85.6	83.2	86.5	94.4	105.3	*	*
11 years	81.6	85.8	82.8	88.5	92.8	*	*	*
Boys 6-11 years	83.2	86.3	88.4	88.4	92.4	95.7	99.6	98.9
Girls 6-11 years	82.8	85.1	84.8	87.9	92.7	93.8	94.8	95.8

[1]The father or if he is not in the home, the mother or guardian.

Table 40. Average deviation IQ's on the Wechsler Intelligence Scale for Children, by age, sex, region, and education of parent: United States, 1963-65

Region, age, and sex	Years of schooling completed[1]							
	Less than 5 years	5-7 years	8 years	9-11 years	12 years	13-15 years	16 years	17 years or more
	Deviation IQ							
Northeast								
Both sexes 6-11 years	85.7	91.3	96.2	99.2	102.8	108.2	106.9	111.3
6 years	82.2	94.4	96.8	97.0	103.7	107.3	109.1	108.0
7 years	79.9	94.2	98.9	99.6	101.1	106.0	107.2	121.6
8 years	79.2	92.8	98.7	101.5	103.3	109.2	104.6	111.9
9 years	92.2	90.7	97.9	100.5	103.8	115.6	111.3	112.9
10 years	95.1	93.5	97.0	98.3	103.5	107.7	106.4	113.8
11 years	89.1	91.0	94.0	101.4	103.6	111.3	109.7	115.6
Boys 6-11 years	85.8	93.2	96.6	100.9	105.8	109.3	109.4	112.9
Girls 6-11 years	85.4	89.6	95.8	97.6	99.8	107.3	104.0	109.8
Midwest								
Both sexes 6-11 years	86.0	97.5	99.2	98.2	102.8	106.8	109.2	111.1
6 years	94.8	101.6	99.8	99.3	101.6	106.0	108.7	111.8
7 years	91.8	93.9	99.4	98.9	103.3	104.5	108.8	112.6
8 years	111.4	101.1	98.1	98.1	103.5	105.5	110.0	112.4
9 years	80.2	101.7	102.6	98.8	102.1	111.7	113.8	113.0
10 years	*	98.9	99.5	98.2	104.5	107.9	108.3	111.9
11 years	86.2	98.9	99.4	98.0	103.2	113.7	113.5	113.6
Boys 6-11 years	91.1	100.2	98.8	99.3	103.5	109.4	112.8	112.5
Girls 6-11 years	84.0	94.2	99.4	97.0	102.0	103.9	105.1	109.2
South								
Both sexes 6-11 years	84.4	87.4	91.3	94.6	99.5	106.9	111.5	111.1
6 years	89.4	86.5	94.6	95.4	99.0	109.5	116.8	112.3
7 years	85.5	89.1	91.8	94.4	100.7	115.3	106.6	118.1
8 years	84.0	88.7	95.2	93.7	97.4	105.1	111.9	110.1
9 years	83.5	88.1	92.2	93.7	99.8	98.4	116.8	103.8
10 years	83.3	87.6	89.8	95.2	99.7	114.4	117.8	113.5
11 years	82.6	86.9	91.2	99.7	103.4	102.9	111.0	108.4
Boys 6-11 years	85.4	88.4	95.0	95.7	99.7	108.8	116.2	112.4
Girls 6-11 years	83.4	86.4	88.6	93.4	99.2	104.9	107.3	109.6
West								
Both sexes 6-11 years	85.9	93.3	97.3	98.3	105.2	109.7	111.0	114.0
6 years	86.1	92.8	96.1	95.4	106.6	112.4	114.0	120.9
7 years	88.8	95.6	100.2	99.4	105.0	116.7	108.9	112.0
8 years	86.0	93.9	98.1	101.7	104.2	107.5	110.1	117.3
9 years	85.2	99.0	101.2	100.3	105.7	107.2	118.7	114.9
10 years	84.2	95.1	98.6	97.6	107.5	109.3	109.5	115.6
11 years	88.5	92.2	96.5	100.2	104.5	111.5	114.4	112.6
Boys 6-11 years	86.0	94.9	97.4	99.0	106.8	111.3	112.5	113.7
Girls 6-11 years	85.7	91.5	97.2	97.6	103.6	108.0	109.0	114.3

[1]The father or if he is not in the home, the mother or guardian.

Table 41. Average Vocabulary raw scores on the Wechsler Intelligence Scale for Children, by age, sex, and grade in school: United States, 1963-65

Age and sex	Grade in school								
	Kinder-garten	First grade	Second grade	Third grade	Fourth grade	Fifth grade	Sixth grade	Seventh grade	Special class, ungraded
	Vocabulary raw score								
Both sexes									
6-11 years	15.8	16.4	20.2	24.6	28.8	32.5	37.0	38.9	16.8
6 years	15.8	16.4	18.3	-	-	-	-	-	14.6
7 years	24.7	16.8	20.4	23.2	-	-	-	-	15.6
8 years	-	14.2	21.5	25.0	27.9	-	-	-	13.2
9 years	-	15.4	16.9	25.1	29.4	31.3	-	-	14.4
10 years	-	*	13.9	20.6	29.0	33.2	37.1	*	16.1
11 years	-	-	43.0	23.7	23.1	31.5	37.1	38.9	24.2
Boys									
6-11 years	16.9	17.1	20.9	25.4	30.5	33.6	38.6	40.2	17.6
6 years	16.0	17.1	18.8	-	-	-	-	-	13.1
7 years	20.0	17.7	21.3	24.7	-	-	-	-	15.6
8 years	-	13.6	22.1	25.9	29.0	-	-	-	14.8
9 years	-	17.9	16.8	25.1	31.1	32.5	-	-	15.7
10 years	-	20.0	15.2	23.1	30.9	34.6	38.7	-	15.8
11 years	-	-	16.9	22.0	25.4	32.2	38.6	40.2	24.8
Girls									
6-11 years	15.5	15.7	19.4	23.7	27.0	31.4	35.6	38.0	15.2
6 years	15.5	15.8	17.9	-	-	-	-	-	16.5
7 years	-	15.6	19.4	21.8	-	-	-	-	14.4
8 years	-	14.9	20.7	24.1	26.8	-	-	-	11.1
9 years	-	12.4	16.6	25.0	27.7	29.9	-	-	12.0
10 years	-	-	9.4	16.7	26.5	32.0	35.6	40.0	16.0
11 years	-	-	11.0	25.0	19.2	30.2	35.6	38.0	21.6

Table 42. Average Block Design raw scores on the Wechsler Intelligence Scale for Children, by age, sex, and grade in school: United States, 1963-65

Age and sex	Grade in school								
	Kinder-garten	First grade	Second grade	Third grade	Fourth grade	Fifth grade	Sixth grade	Seventh grade	Special class, ungraded
	Block Design raw score								
Both sexes									
6-11 years	5.2	5.5	7.7	10.2	13.1	17.8	21.3	25.1	6.4
6 years	6.3	5.5	7.8	-	-	-	-	-	4.5
7 years	4.7	6.6	8.2	9.8	-	-	-	-	4.3
8 years	-	4.3	9.2	11.6	14.8	-	-	-	3.7
9 years	-	4.6	5.6	10.6	14.1	17.6	-	-	5.9
10 years	-	2.3	5.3	10.6	14.4	19.6	22.1	30.7	7.5
11 years	-	-	11.0	11.6	11.3	17.2	23.0	26.6	11.2
Boys									
6-11 years	7.3	5.9	8.7	12.0	15.2	19.7	24.4	28.8	7.0
6 years	7.4	5.5	7.6	-	-	-	-	-	3.7
7 years	4.0	7.4	8.9	10.5	-	-	-	-	4.1
8 years	-	4.3	9.4	12.8	16.0	-	-	-	2.6
9 years	-	3.4	6.6	10.4	15.4	18.9	-	-	4.7
10 years	-	2.0	5.3	12.5	15.9	20.4	22.4	-	7.7
11 years	-	-	5.0	12.8	12.6	18.5	24.8	28.8	12.5
Girls									
6-11 years	5.2	5.5	7.7	10.2	13.1	17.8	21.3	25.1	6.4
6 years	5.2	5.5	7.8	-	-	-	-	-	5.7
7 years	-	5.6	7.5	9.2	-	-	-	-	5.1
8 years	-	4.1	8.9	10.3	13.6	-	-	-	4.6
9 years	-	4.9	4.0	10.8	13.0	16.1	-	-	7.3
10 years	-	-	5.4	7.8	13.8	18.8	21.6	28.0	6.8
11 years	-	-	2.0	8.3	9.0	15.1	21.3	25.1	7.2

Table 43. Average Vocabulary and Block Design raw scores on the Wechsler Intelligence Scale for white children, by age, sex, and grade in school: United States, 1963-65

Age and sex	Grade in school								
	Kindergarten	First grade	Second grade	Third grade	Fourth grade	Fifth grade	Sixth grade	Seventh grade	Special class, ungraded
Both sexes	Vocabulary raw score								
6-11 years	16.7	17.1	20.9	25.5	29.6	33.6	38.1	39.6	16.2
6 years	16.7	17.1	18.8	-	-	-	-	-	14.6
7 years	*	17.7	21.1	23.9	-	-	-	-	16.1
8 years	-	14.5	22.4	25.9	28.3	-	-	-	13.4
9 years	-	*	18.4	26.2	30.2	32.2	-	-	13.7
10 years	-	*	14.2	21.2	30.0	34.4	37.5	*	13.8
11 years	-	-	17.1	26.5	24.0	32.4	38.2	39.7	26.3
Boys 6-11 years	16.7	17.9	21.8	26.4	31.1	34.7	39.5	41.1	17.3
Girls 6-11 years	16.8	16.3	20.0	24.6	28.0	32.5	36.8	38.6	14.5
Both sexes	Block Design raw score								
6-11 years	7.0	6.2	8.8	11.8	15.0	20.1	24.0	27.6	6.3
6 years	7.0	5.9	8.0	-	-	-	-	-	4.4
7 years	*	7.3	8.6	10.4	-	-	-	-	4.4
8 years	-	4.6	10.1	12.3	15.6	-	-	-	4.0
9 years	-	*	6.9	11.5	15.0	18.5	-	-	6.1
10 years	-	*	5.3	11.5	15.3	20.8	22.8	*	4.9
11 years	-	-	4.1	14.8	11.5	19.0	24.2	27.7	12.7
Boys 6-11 years	8.0	6.5	9.3	12.8	15.8	21.0	25.5	29.8	6.4
Girls 6-11 years	5.8	5.8	8.2	10.8	14.1	19.1	22.6	26.1	6.3

Table 44. Average Vocabulary and Block Design raw scores on the Wechsler Intelligence Scale for Negro children, by age, sex, and grade in school: United States, 1963-65

Age and sex	Grade in school								
	Kindergarten	First grade	Second grade	Third grade	Fourth grade	Fifth grade	Sixth grade	Seventh grade	Special class, ungraded
Both sexes	Vocabulary raw score								
6-11 years	11.0	12.8	15.6	18.8	22.7	25.6	29.0	29.1	18.4
6 years	11.2	12.8	13.3	-	-	-	-	-	-
7 years	-	12.8	15.4	16.3	-	-	-	-	*
8 years	-	13.4	18.0	18.8	25.1	-	-	-	*
9 years	-	18.9	13.1	20.1	23.4	23.7	-	-	*
10 years	-	-	*	19.1	21.9	25.2	34.8	-	18.4
11 years	-	-	*	*	20.0	27.6	28.2	30.1	22.0
Boys 6-11 years	12.4	13.1	16.0	19.4	24.8	26.9	31.2	27.9	18.2
Girls 6-11 years	10.1	12.5	15.3	18.1	21.2	24.3	27.3	29.7	19.2
Both sexes	Block Design raw score								
6-11 years	2.6	3.1	4.9	6.5	8.2	10.1	13.6	13.2	8.1
6 years	2.7	3.0	5.5	-	-	-	-	-	-
7 years	-	3.4	5.0	4.9	-	-	-	-	*
8 years	-	3.1	5.3	6.8	8.2	-	-	-	*
9 years	-	*	2.3	6.6	8.1	8.1	-	-	*
10 years	-	-	*	7.9	8.4	10.8	16.3	-	9.6
11 years	-	-	*	*	9.1	9.5	13.2	13.6	9.2
Boys 6-11 years	3.1	2.7	5.1	6.6	9.6	11.0	15.0	15.1	8.2
Girls 6-11 years	2.3	3.6	4.8	6.4	7.2	9.1	12.5	12.2	7.3

Table 45. Average Vocabulary and Block Design raw scores on the Wechsler Intelligence Scale for Children in the Northeast by age, sex, and grade in school: United States, 1963-65

Age and sex	Grade in school								
	Kindergarten	First grade	Second grade	Third grade	Fourth grade	Fifth grade	Sixth grade	Seventh grade	Special class, ungraded
Both sexes	Vocabulary raw score								
6-11 years	14.1	16.7	19.5	24.8	28.9	32.8	38.3	40.5	16.2
6 years	14.0	16.4	18.2	-	-	-	-	-	14.3
7 years	-	17.6	19.9	23.7	-	-	-	-	*
8 years	-	*	19.7	25.7	27.6	-	-	-	-
9 years	-	-	*	23.0	30.2	31.6	-	-	15.0
10 years	-	-	*	17.2	26.8	34.0	37.8	-	15.6
11 years	-	-	-	-	20.2	29.5	38.6	40.5	*
Boys 6-11 years	14.3	17.9	19.8	26.1	30.3	33.5	40.1	40.8	17.1
Girls 6-11 years	13.7	15.4	19.1	23.6	27.6	31.8	36.7	40.2	14.1
Both sexes	Block Design raw score								
6-11 years	7.9	5.8	7.6	11.4	14.0	18.1	21.7	27.7	7.8
6 years	7.3	5.6	7.6	-	-	-	-	-	5.5
7 years	-	7.2	7.5	9.8	-	-	-	-	*
8 years	-	*	8.1	12.4	14.4	-	-	-	-
9 years	-	-	*	9.9	14.8	17.7	-	-	4.8
10 years	-	-	*	9.9	11.5	19.0	21.8	-	9.6
11 years	-	-	-	-	9.1	14.4	21.8	27.8	*
Boys 6-11 years	10.0	6.4	7.9	13.1	14.9	19.3	23.6	28.4	8.1
Girls 6-11 years	4.6	5.2	7.2	9.8	13.2	16.6	19.9	27.1	7.1

Table 46. Average Vocabulary and Block Design raw scores on the Wechsler Intelligence Scale for Children in the Midwest by age, sex, and grade in school: United States, 1963-65

Age and sex	Grade in school								
	Kindergarten	First grade	Second grade	Third grade	Fourth grade	Fifth grade	Sixth grade	Seventh grade	Special class, ungraded
Both sexes	Vocabulary raw score								
6-11 years	15.6	16.4	20.3	24.4	29.3	32.8	36.3	39.1	16.9
6 years	15.6	16.0	19.0	-	-	-	-	-	14.4
7 years	*	17.4	20.0	23.0	-	-	-	-	*
8 years	-	15.6	21.8	24.8	28.4	-	-	-	17.6
9 years	-	-	31.0	24.8	29.5	33.6	-	-	12.6
10 years	-	-	-	20.3	29.6	33.1	37.7	*	14.8
11 years	-	-	-	*	23.3	30.3	36.0	39.7	24.9
Boys 6-11 years	16.9	16.7	21.2	24.9	30.8	33.6	37.5	41.9	16.6
Girls 6-11 years	14.7	16.0	19.4	23.8	27.7	32.0	35.2	37.6	17.3
Both sexes	Block Design raw score								
6-11 years	5.9	6.2	8.9	11.7	16.2	20.4	24.6	28.6	7.8
6 years	6.1	6.0	7.9	-	-	-	-	-	3.8
7 years	*	6.8	9.0	11.4	-	-	-	-	*
8 years	-	5.0	10.0	12.4	16.4	-	-	-	4.6
9 years	-	-	7.4	10.1	15.6	21.3	-	-	4.8
10 years	-	-	-	10.6	17.1	20.6	24.8	*	6.4
11 years	-	-	-	*	15.6	17.4	24.6	29.4	15.4
Boys 6-11 years	6.1	6.2	9.6	13.0	17.8	21.1	25.9	32.4	8.8
Girls 6-11 years	5.9	6.2	8.3	10.5	14.5	19.6	23.4	26.5	6.5

Table 47. Average Vocabulary and Block Design raw scores on the Wechsler Intelligence Scale for Children in the South by age, sex, and grade in school: United States, 1963-65

Age and sex	Grade in school								
	Kindergarten	First grade	Second grade	Third grade	Fourth grade	Fifth grade	Sixth grade	Seventh grade	Special class, ungraded
Both sexes	Vocabulary raw score								
6-11 years	16.4	15.0	18.6	22.0	25.6	29.5	34.2	33.6	17.9
6 years	16.4	15.2	17.1	-	-	-	-	-	*
7 years	-	14.4	19.2	20.4	-	-	-	-	*
8 years	-	13.0	19.7	22.2	24.7	-	-	-	*
9 years	-	16.4	13.6	22.6	26.4	25.6	-	-	10.5
10 years	-	*	11.4	18.5	24.8	30.4	32.5	-	*
11 years	-	-	14.0	17.8	20.6	29.1	34.8	33.6	35.4
Boys 6-11 years	20.3	15.8	19.4	23.1	28.0	30.9	36.0	35.9	20.2
Girls 6-11 years	11.9	14.1	17.7	20.8	23.3	28.4	33.0	31.2	15.9
Both sexes	Block Design raw score								
6-11 years	6.3	4.5	6.8	8.4	10.5	14.9	18.9	17.1	5.8
6 years	6.2	4.6	6.3	-	-	-	-	-	*
7 years	-	4.5	7.2	5.8	-	-	-	-	*
8 years	-	3.2	7.4	8.6	11.9	-	-	-	*
9 years	-	4.2	3.2	8.8	10.5	10.8	-	-	*
10 years	-	*	4.5	9.0	10.8	15.7	14.4	-	*
11 years	-	-	3.5	5.6	8.2	15.0	19.8	17.2	9.8
Boys 6-11 years	8.3	4.3	7.1	8.4	11.4	15.9	20.9	21.3	4.4
Girls 6-11 years	4.0	4.7	6.5	8.5	9.6	14.1	17.5	13.0	7.2

Table 48. Average Vocabulary and Block Design raw scores on the Wechsler Intelligence Scale for Children in the West by age, sex, and grade in school: United States, 1963-65

Age and sex	Grade in school								
	Kindergarten	First grade	Second grade	Third grade	Fourth grade	Fifth grade	Sixth grade	Seventh grade	Special class, ungraded
Both sexes	Vocabulary raw score								
6-11 years	16.6	17.8	22.3	27.1	31.0	34.8	39.9	42.7	16.7
6 years	16.6	18.1	19.2	-	-	-	-	-	*
7 years	-	17.8	22.7	26.2	-	-	-	-	10.4
8 years	-	13.9	22.8	27.2	31.6	-	-	-	14.5
9 years	-	*	15.4	28.6	31.2	31.6	-	-	15.2
10 years	-	-	*	21.1	31.9	35.8	42.0	-	18.7
11 years	-	-	-	26.6	24.0	33.8	39.8	42.3	23.9
Boys 6-11 years	15.5	18.4	23.1	27.5	32.6	36.2	41.3	41.6	18.1
Girls 6-11 years	17.6	17.2	21.4	26.6	29.3	33.3	38.5	43.0	12.0
Both sexes	Block Design raw score								
6-11 years	5.7	6.4	9.4	12.7	15.3	20.9	26.0	30.6	5.4
6 years	5.7	5.9	13.8	-	-	-	-	-	-
7 years	-	7.2	8.8	12.2	-	-	-	-	4.4
8 years	-	4.7	10.2	12.6	12.6	-	-	-	4.6
9 years	-	*	8.6	13.2	15.4	17.0	-	-	5.2
10 years	-	-	*	10.8	16.2	22.6	17.6	-	6.2
11 years	-	-	-	16.4	10.8	18.6	25.8	32.2	8.9
Boys 6-11 years	6.2	7.0	10.0	13.3	15.6	21.5	26.6	35.2	5.5
Girls 6-11 years	5.2	5.9	8.6	12.0	14.9	20.2	25.4	29.2	5.2

Table 49. Average deviation IQ's on the Wechsler Intelligence Scale for Children, by age, sex, and grade in school: United States, 1963-65

Age and sex	Grade in school								
	Kinder-garten	First grade	Second grade	Third grade	Fourth grade	Fifth grade	Sixth grade	Seventh grade	Special class, ungraded
	Deviation IQ								
Both sexes									
6-11 years	103.3	98.4	99.4	99.7	100.3	101.4	103.6	105.0	82.1
6 years	103.6	99.9	103.4	-	-	-	-	-	96.5
7 years	*	95.9	101.1	104.9	-	-	-	-	89.1
8 years	-	82.9	95.9	101.3	105.0	-	-	-	80.0
9 years	-	77.6	82.5	95.6	102.5	105.8	-	-	80.3
10 years	-	*	75.6	86.3	96.0	102.7	106.4	*	79.0
11 years	-	-	69.7	82.9	84.5	95.4	103.1	105.1	84.3
Boys									
6-11 years	106.3	99.5	100.6	101.1	102.7	103.0	106.0	107.6	83.1
6 years	106.5	100.9	103.5	-	-	-	-	-	91.0
7 years	97.0	98.1	103.2	107.5	-	-	-	-	87.7
8 years	-	81.7	96.7	103.5	107.7	-	-	-	78.6
9 years	-	79.4	82.6	95.1	105.4	108.4	-	-	79.7
10 years	-	80.0	75.6	89.5	98.0	104.5	108.0	-	78.2
11 years	-	-	74.4	83.4	86.8	96.9	105.6	107.6	85.0
Girls									
6-11 years	100.2	97.1	98.2	98.2	97.9	99.8	101.3	103.3	80.2
6 years	100.2	98.8	103.2	-	-	-	-	-	98.8
7 years	-	92.8	99.1	102.0	-	-	-	-	85.9
8 years	-	82.6	94.5	99.2	102.4	-	-	-	76.6
9 years	-	75.9	80.5	96.0	99.7	102.7	-	-	77.7
10 years	-	-	71.0	79.8	93.0	101.0	104.5	111.0	77.3
11 years	-	-	65.0	82.4	79.2	93.0	100.7	103.3	78.4

Table 50. Average deviation IQ's on the Wechsler Intelligence Scale for white and Negro children, by age, sex, and grade in school: United States, 1963-65

Race, age, and sex	Grade in school								
	Kindergarten	First grade	Second grade	Third grade	Fourth grade	Fifth grade	Sixth grade	Seventh grade	Special class, ungraded
White	Deviation IQ								
Both sexes 6-11 years	106.3	100.4	101.3	101.7	101.9	103.5	105.2	106.2	82.6
6 years	106.4	101.8	104.5	-	-	-	-	-	96.5
7 years	*	98.3	102.8	106.5	-	-	-	-	88.9
8 years	-	83.3	97.8	103.2	106.4	-	-	-	81.0
9 years	-	*	85.2	97.7	104.1	107.4	-	-	80.4
10 years	-	*	77.1	87.5	97.5	104.8	107.3	*	76.5
11 years	-	-	72.0	90.8	85.4	97.6	105.0	106.4	88.4
Boys 6-11 years	108.6	102.1	102.7	103.4	103.9	105.0	107.4	108.8	84.2
Girls 6-11 years	103.9	98.6	99.9	99.9	99.9	101.9	103.3	104.4	80.2
Negro									
Both sexes 6-11 years	87.9	87.8	87.8	87.1	88.6	87.9	90.5	89.4	80.6
6 years	89.2	89.3	93.5	-	-	-	-	-	-
7 years	-	86.0	89.8	90.2	-	-	-	-	*
8 years	-	85.6	88.1	89.1	94.6	-	-	-	*
9 years	-	79.2	75.9	86.1	90.9	89.5	-	-	*
10 years	-	-	*	84.7	85.4	88.8	100.0	-	81.6
11 years	-	-	*	*	80.9	87.1	89.4	89.5	78.6
Boys 6-11 years	92.1	86.9	87.8	87.0	92.1	89.6	93.8	89.8	80.7
Girls 6-11 years	85.0	88.8	87.8	87.3	86.2	86.2	88.0	89.2	79.9

Table 51. Average deviation IQ's on the Wechsler Intelligence Scale for Children, by age, sex, region, and grade in school: United States, 1963-65

Region, age, and sex	Grade in school								
	Kinder-garten	First grade	Second grade	Third grade	Fourth grade	Fifth grade	Sixth grade	Seventh grade	Special class, ungraded
	Deviation IQ								
Northeast									
Both sexes 6-11 years--	103.6	100.5	99.3	102.0	101.8	102.4	104.7	107.1	81.2
6 years	106.0	101.1	103.3	-	-	-	-	-	96.3
7 years	-	98.9	100.2	105.7	-	-	-	-	*
8 years	-	*	93.6	103.1	104.9	-	-	-	-
9 years	-	-	*	94.7	104.1	107.8	-	-	79.2
10 years	-	-	*	94.9	93.0	103.8	108.0	-	78.5
11 years	-	-	-	-	80.8	93.0	104.1	107.8	*
Boys 6-11 years	108.5	103.2	99.9	104.7	103.7	104.0	107.4	107.6	81.9
Girls 6-11 years	96.1	97.7	98.8	99.5	100.0	100.3	102.0	106.6	79.6
Midwest									
Both sexes 6-11 years--	102.1	99.5	101.2	100.9	103.2	103.3	104.6	106.5	85.2
6 years	103.4	100.5	105.1	-	-	-	-	-	95.0
7 years	*	97.6	101.9	106.9	-	-	-	-	*
8 years	-	82.1	97.9	102.4	108.0	-	-	-	85.7
9 years	-	-	105.7	95.3	104.2	110.0	-	-	76.2
10 years	-	-	-	89.1	100.5	103.4	109.4	*	76.4
11 years	-	-	-	*	88.2	97.0	103.8	106.5	87.3
Boys 6-11 years	105.6	99.9	102.3	102.6	105.8	103.9	106.8	111.5	85.8
Girls 6-11 years	99.5	99.0	100.2	99.2	100.3	102.6	102.4	103.8	84.4
South									
Both sexes 6-11 years--	105.6	93.6	94.7	92.8	93.1	95.3	97.9	94.6	81.0
6 years	108.7	96.0	99.7	-	-	-	-	-	*
7 years	-	89.8	97.9	97.8	-	-	-	-	*
8 years	-	79.4	92.3	94.8	99.6	-	-	-	*
9 years	-	79.4	78.0	91.7	95.9	95.7	-	-	78.8
10 years	-	*	72.1	82.3	89.7	97.0	96.6	-	*
11 years	-	-	69.7	75.1	81.8	92.3	98.5	95.9	92.3
Boys 6-11 years	116.1	94.2	95.9	93.6	96.0	97.4	100.6	99.2	83.6
Girls 6-11 years	93.7	92.7	93.4	91.9	90.4	93.5	96.1	90.1	78.7
West									
Both sexes 6-11 years--	103.2	100.8	102.2	102.6	102.2	104.1	107.4	110.3	80.2
6 years	103.9	102.6	117.3	-	-	-	-	-	*
7 years	-	100.0	104.9	112.8	-	-	-	-	80.2
8 years	-	83.2	98.8	104.7	111.0	-	-	-	82.0
9 years	-	*	82.6	102.6	105.8	110.0	-	-	80.4
10 years	-	-	*	88.4	99.9	107.0	107.5	-	80.7
11 years	-	-	-	89.2	86.9	99.0	107.3	111.9	81.9
Boys 6-11 years	102.7	102.3	104.0	103.3	104.0	105.5	108.6	111.9	81.8
Girls 6-11 years	103.7	99.3	99.9	101.8	100.4	102.5	106.3	109.8	75.2

APPENDIX I

STATISTICAL NOTES

The Survey Design

The sample design for the second cycle of the Health Examination Survey, similar to the one used for the first cycle, was that of a multistage, stratified probability sample of loose clusters of persons in land-based segments. Successive elements dealt with in the process of sampling are the primary sampling unit (PSU), census enumeration district (ED), segment, household, eligible child (EC), and the sample child (SC).

At the first stage, the nearly 2,000 PSU's into which the United States (including Hawaii and Alaska) had been divided and then grouped into 357 strata for use in the Current Population Survey and Health Interview Survey were further grouped into 40 superstrata for use in Cycle II of the Health Examination Survey. The average size of each Cycle II stratum was 4.5 million persons, and all strata fell between the limits of 3.5 and 5.5 million. Grouping into 40 strata was done in a way that maximized homogeneity of the PSU's included in each stratum, particularly with regard to the degree of urbanization, geographic proximity, and degree of industrialization. The 40 strata were classified into four broad geographic regions (each with 10 strata) of approximately equal population and cross-classified into four broad population density groups (each having 10 strata). Each of the 16 cells contained either two or three strata. A single stratum might include only one PSU, only part of a PSU (e.g., New York City, which represented two strata), or several score PSU's.

To take account of the possible effect that the rate of population change between the 1950 and 1960 Census might have had on health, the 10 strata within each region were further classified into four classes ranging from those with no increase to those with the greatest relative increase. Each such class contained two or three strata.

One PSU was then selected from each of the 40 strata. A controlled selection technique was used in which the probability of selection of a particular PSU was proportional to its 1960 population. In the controlled selection an attempt was also made to maximize the spread of the PSU's among the States. While not every one of the 64 cells in the 4x4x4 grid contributes a PSU to the sample of 40 PSU's, the controlled selection technique ensured the sample's matching the marginal distributions in all three dimensions and being closely representative of all cross-classifications.

Generally, within a particular PSU, 20 ED's were selected with the probability of selection of a particular ED proportional to its population in the age groups 5-9 years in the 1960 Census, which by 1963 roughly approximated the population in the target age group for Cycle II. A similar method was used for selecting one segment (cluster of households) in each ED. Each of the resultant 20 segments was either a bounded area or a cluster of households (or addresses). All of the children in the age range properly resident at the address visited were EC's. Operational considerations made it necessary to reduce the number of prospective examinees at any one location to a maximum of 200. The EC's to be excluded for this reason from the SC group were determined by systematic subsampling.

The total sample included 7,417 children from 25 different States in the age group 6-11 years, with approximately 1,000 in each of the single years of age.

Reliability

Measurement processes employed in the survey were highly standardized and closely controlled. Of course, this does not mean that the correspondence between the real world and the survey results is exact. Data from the survey are imperfect for three major reasons: (1) results are subject to sampling error, (2) the actual conduct of a survey never agrees perfectly with the design, and (3) the measurement processes themselves are inexact even though standardized and controlled.

The first report on Cycle II[1] describes in detail the faithfulness with which the sample design was carried out. It notes that out of the 7,417 sample children the 7,119 who were examined—a response rate of 96 percent—gave evidence that they were a

highly representative sample of children of this age in the noninstitutional population of the United States. The response levels for the various demographic subgroups—including those for age, sex, race, region, population density, parents' educational level, and family income—show no marked differentials. Hence it appears unlikely that nonresponse could bias the findings much in these respects. The number of examinees aged 6-11 years by region, race, size of place of residence, family income, and education of parent is shown in table I.

Measures used to control the quality of the data from this survey in general have been cited previously;[1] those relating specifically to the Wechsler Intelligence Scale for Children are outlined in an earlier section of this report.

Data recorded for each sample child are inflated in the estimation process to characterize the larger universe of which the sample child is representative. The weights used in this inflation process are a product of the reciprocal of the probability of selecting

Table I. Number of examinees aged 6-11 years, by region, race, urban-rural residence, family income, and education of parent: United States, 1963-65

Characteristic	Number of examinees	Region				Race	
		Northeast	Midwest	South	West	White	Negro
	Number of children						
Total	7,119	1,782	1,896	1,707	1,734	...	...
Race							
White	6,100	1,577	1,712	1,237	1,574	...	...
Negro	987	202	176	470	139	...	...
Other races	32	3	8	0	21	...	...
Residence							
Urban	4,796	1,389	1,285	910	1,212	3,972	806
Rural	2,323	393	611	797	522	2,128	181
Income							
Less than $3,000	1,223	140	203	629	251	801	418
$3,000-$4,999	1,280	266	337	348	329	1,000	279
$5,000-$6,999	1,652	500	482	297	373	1,479	157
$7,000-$9,999	1,451	435	454	203	359	1,377	71
$10,000-$14,999	813	235	259	99	220	802	10
$15,000 or more	329	100	90	60	79	326	-
Unknown	371	106	71	71	123	315	52
Education of parent							
Less than 5 years	472	47	23	261	141	333	139
5-7 years	656	128	90	325	113	429	225
8 years	787	164	293	171	159	689	98
9-11 years	1,466	428	422	305	311	1,198	256
12 years	2,192	580	702	352	558	1,995	191
13-15 years	550	144	155	86	165	524	26
16 years	537	148	121	98	170	518	14
17 years or more	373	126	73	76	98	362	8
Unknown	86	17	17	33	19	52	30

the child, an adjustment for nonresponse cases, and a poststratified ratio adjustment which increases precision by bringing survey results into closer alignment with known U.S. population figures by color and sex within single years of age 6-11.

In the second cycle of the Health Examination Survey, the sample was the result of three stages of selection—the single PSU from each stratum, the 20 segments from each sample PSU, and the sample children from the eligible children. The probability of selecting an individual child is the product of the probabilities of selection at each stage.

Since the strata are roughly equal in population size and a nearly equal number of sample children were examined in each of the sample PSU's the sample design is essentially self-weighting with respect to the target population; that is, each child 6-11 years had about the same probability of being drawn into the sample.

The adjustment upward for nonresponse is intended to minimize the impact of this factor on final estimates by imputing to nonrespondents the charactistics of "similar" respondents. Here "similar" respondents were judged to be examined children in a sample PSU having the same age (in years) and sex as children not examined in that sample PSU.

The poststratified ratio adjustment used in the second cycle achieved most of the gains in precision which would have been attained if the sample had been drawn from a population stratified by age, color, and sex and made the final sample estimates of population agree exactly with independent controls prepared by the Bureau of the Census for the noninstitutional population of the United States as of August 1, 1964 (approximate mid-survey point), by color and sex for each single year of age 6 through 11. The weight of every responding sample child in each of the 24 age, color, and sex classes is adjusted upward or downward so that the weighted total within the class equals the independent population control.

In addition to children not examined at all, there were some whose examination was incomplete in one procedure or another. The extent and the methods used for estimating missing data for the WISC subtests were described in a previous report.[6]

Sampling and Measurement Error

In the present report, reference has been made to efforts to minimize bias and variability of measurement techniques.

The probability design of the survey makes possible the calculation of sampling errors. The sampling error is used here to determine how imprecise the survey test results may be because they come from a sample rather than from the measurement of all elements in the universe.

The estimation of sampling errors for a study of the type of the Health Examination Survey is difficult for at least three reasons:(1) measurement error and "pure" sampling error are confounded in the data—it is not easy to find a procedure which will either completely include both or treat one or the other separately, (2) the survey design and estimation procedure are complex and accordingly require computationally involved techniques for the calculation of variances, and (3) from the survey are coming thousands of statistics, many for subclasses of the population for which there are a small number of cases. Estimates of sampling error are obtained from the sample data and are themselves subject to sampling error which may be large when the number of cases in a cell is small or even occasionally when the number of cases is substantial.

Estimates of approximate sampling variability for selected statistics used in this report are presented in tables II-IV. These estimates have been prepared by a replication technique which yields overall variability through observation of variability among random subsamples of the total sample as described previously.[17] This method reflects both "pure" sampling variance and a part of the measurement variance. A similar pseudoreplication technique was used to estimate the standard errors of the correlation coefficients shown in the Findings and Discussion sections.[18]

In accordance with usual practice, the interval estimate for any statistic may be considered the range within one standard error of the tabulated statistic with 68-percent confidence, or the range within two standard errors of the tabulated statistic with 95-percent confidence. The latter is used as the level of significance in this report.

An approximation of the standard error of a difference $\underline{d}=\underline{x}-\underline{y}$ of two statistics $\underline{x}$ and $\underline{y}$ is given by the formula $S_d = (S_x^2 + S_y^2)^{1/2}$ where S_x and S_y are the sampling errors, respectively, of $\underline{x}$ and $\underline{y}$.

Small Categories

In some tables, magnitudes are shown for cells for which the sample size is so small that the sampling error may be several times as great as the statistic itself. Obviously in such instances the statistic has no meaning in itself except to indicate that the true quantity is small. Such numbers, if shown, have been included in the belief that they may help

to convey an impression of the overall story of the table.

Scaled Scores and Deviation IQ's

The following formula was used for computing the scaled scores (SS) shown in this report:

$$SS_i = \frac{1}{s_{x_i}} (3)(x - \bar{x}_i) + 10$$

where s_{x_i} is the standard deviation of the raw scores in the i^{th} age interval, $\bar{x}_i$ is the arithmetic mean or average raw score in that age interval (both s_{x_i} and $\bar{x}_i$ are derived from the inflated sample data from this study) and x is the raw score for which the scaled score is being derived.

The deviation intelligence quotients (IQ) shown in this report were derived from the distribution of the sum of the scaled scores on the two subtests computed as decribed above using:

$$D\text{-}IQ_i = \frac{1}{s_{ss_i}} (15)(ss - \overline{ss}_i) + 100$$

where ss here represents the sum of the two scaled scores for each child as described previously.[6]

Table II. Standard errors of estimate for mean raw scores and deviation IQ's on the Wechsler Intelligence Scale for Children, by race, region, and selected ages; and the number of examinees in the sample: United States, 1963-65

Test, race, and region	Number of examinees 6-11 years	Both sexes 6-11 years	Boys				Girls			
			6-11 years	6 years	9 years	11 years	6-11 years	6 years	9 years	11 years
Vocabulary raw scores		Standard error of estimate for population means								
White	6,100	0.45	0.49	0.36	0.60	0.52	0.42	0.31	0.52	0.73
Negro	987	0.60	0.76	0.48	1.48	1.33	0.56	0.65	1.14	0.98
Other races	32	1.54	2.82	9.40	6.13	15.59	1.89	7.33	8.83	15.73
Northeast	1,782	0.51	0.57	0.64	0.70	0.79	0.67	0.53	0.66	1.38
Midwest	1,896	0.42	0.44	0.42	0.86	0.73	0.52	0.41	0.62	1.23
South	1,707	1.08	1.20	0.59	1.29	1.49	1.06	0.49	1.40	1.37
West	1,734	1.68	1.80	1.24	2.12	1.79	1.59	1.55	1.49	1.78
Block Design raw scores										
White	-----	0.32	0.35	0.29	0.50	0.65	0.36	0.27	0.45	0.97
Negro	-----	0.31	0.40	0.27	0.75	0.95	0.26	0.25	0.54	0.83
Other	-----	2.82	5.64	4.12	11.34	14.78	1.93	3.76	6.38	10.61
Northeast	-----	0.56	0.61	0.58	0.65	1.24	0.72	0.47	0.89	1.52
Midwest	-----	0.62	0.50	0.42	1.15	1.39	0.83	0.34	1.00	2.22
South	-----	0.87	0.92	0.65	1.07	1.33	0.85	0.36	0.74	1.48
West	-----	0.76	0.95	0.53	1.06	2.00	0.85	0.72	1.47	2.20
Deviation IQ's										
White	-----	0.74	0.81	0.97	1.06	0.77	0.73	0.85	0.84	1.15
Negro	-----	0.89	1.24	1.24	1.63	1.77	0.69	1.32	1.52	1.28
Other	-----	4.51	9.62	52.78	51.71	47.71	2.69	42.76	32.54	40.29
Northeast	-----	1.10	1.20	1.71	2.10	1.32	1.23	1.20	1.57	1.92
Midwest	-----	0.87	0.85	1.19	0.67	1.44	0.96	1.01	1.06	2.22
South	-----	1.86	2.07	2.05	2.91	2.14	1.72	1.14	2.21	2.11
West	-----	2.42	2.47	2.43	2.73	2.59	2.41	3.64	2.70	2.60
		Number of examinees								
Total	-----	7,119	3,632	575	603	628	3,487	536	581	564

Table III. Standard errors of estimate for mean raw scores and deviation IQ's on the Wechsler Intelligence Scale for white and Negro children 6-11 years of age, by sex and region; and the number of examinees in the sample: United States, 1963-65

Test and sex	Northeast		Midwest		South		West	
	White	Negro	White	Negro	White	Negro	White	Negro
Vocabulary raw scores	Standard error of estimate for population means							
Total	0.25	1.84	0.39	0.31	1.03	1.18	1.78	3.45
Boys	0.30	1.74	0.46	0.35	0.99	1.61	1.93	3.93
Girls	0.44	2.16	0.50	0.65	1.16	1.11	1.65	3.34
Block Design raw scores								
Total	0.49	0.65	0.53	0.73	0.87	0.50	0.85	1.21
Boys	0.48	0.79	0.42	1.34	0.85	0.65	1.09	2.09
Girls	0.71	0.78	0.80	0.33	0.96	0.39	0.88	0.65
Deviation IQ's								
Total	0.87	1.65	0.77	0.71	1.83	1.54	2.62	3.33
Boys	0.90	2.12	0.81	1.31	1.81	2.19	2.76	3.40
Girls	1.06	1.60	0.86	0.43	1.92	1.11	2.53	3.50
	Number of examinees							
Total	1,577	202	1,712	176	1,237	470	1,574	139

Table IV. Standard errors of estimate for mean raw scores and deviation IQ's on the Wechsler Intelligence Scale for Children, by selected socioeconomic and other characteristics; and the number of examinees in the sample: United States, 1963-65

Socioeconomic characteristic	Number of examinees 6-11 years	Vocabulary raw score	Block Design raw score	Deviation IQ
		Standard error of estimate for population means		
Urban areas:				
3 million or more	1,493	0.52	0.42	0.89
1 million-2,999,999	964	0.49	0.72	0.75
250,000-999,999	808	1.32	0.83	1.47
Less than 250,000	572	1.79	1.62	2.75
25,000 or more	341	3.35	1.88	5.97
10,000-24,999	210	2.75	1.99	4.37
2,500-9,999	408	0.58	0.58	1.05
Rural areas	2,323	0.64	0.57	1.13
Population change:				
Loss	1,827	0.94	0.82	1.72
Below average gain	1,688	1.05	0.59	1.64
Average gain	1,889	0.78	0.63	1.19
Above average gain	1,715	0.37	0.56	0.93
Annual family income:				
Less than $3,000	1,223	0.75	0.52	1.27
$3,000-$4,999	1,280	0.45	0.43	0.66
$5,000-$6,999	1,652	0.31	0.32	0.58
$7,000-$9,999	1,451	0.24	0.35	0.55
$10,000-$14,999	813	0.57	0.45	0.80
$15,000 or more	329	0.83	1.00	1.56
Education of parent:				
Less than 5 years	472	0.70	0.39	0.89
5-7 years	656	0.70	0.56	1.10
8 years	787	0.36	0.58	0.82
9-11 years	1,466	0.38	0.23	0.49
12 years	2,192	0.22	0.21	0.36
13-15 years	550	0.41	0.73	0.56
16 years	537	0.38	0.56	1.04
17 years or more	373	0.68	0.95	1.23
Grade:				
Kindergarten	94	0.73	0.94	2.21
First	1,127	0.38	0.21	0.92
Second	1,258	0.40	0.23	0.87
Third	1,249	0.41	0.32	0.71
Fourth	1,208	0.52	0.40	0.82
Fifth	1,078	0.43	0.44	0.69
Sixth	791	0.38	0.61	0.59
Seventh	167	0.93	1.37	1.45
Special class	100	1.05	0.83	1.95
Not in school	47	---	---	---

APPENDIX II

DEMOGRAPHIC AND SOCIOECONOMIC VARIABLES AND RELATED TERMS

Age.—The age recorded for each child was the age at last birthday on the date of examination. The age criterion for inclusion in the sample used in this survey was defined in terms of age at time of interview. Since the examination usually took place 2 to 4 weeks after the interview, some of those who were 11 years old at the time of interview became 12 years old by the time of examination. There were 72 such cases. In the adjustment and weighting procedures used to produce national estimates these 72 were included in the 11-year-old group.

Race.—Race was recorded as "white," "Negro," or "other races." The last category included American Indians, Chinese, Japanese, and all races other than white or Negro. Mexican persons were included with "white" unless definitely known to be American Indian or of another race. Negroes and persons of mixed Negro and other parentage were recorded as "Negro."

Geographic region.—For purposes of stratification the United States was divided into four broad geographic regions of approximately equal population. These regions, which correspond closely to those used by the U.S. Bureau of the Census, were as follows:

Region	*States Included*
Northeast -------	Maine, Vermont, New Hampshire, Massachusetts, Connecticut, Rhode Island, New York, New Jersey, and Pennsylvania
Midwest --------	Ohio, Illinois, Indiana, Michigan, Wisconsin, Minnesota, Iowa, and Missouri
South ----------	Delaware, Maryland, District of Columbia, West Virginia, Virginia, Kentucky, Tennessee, North Carolina, South Carolina, Georgia, Florida, Alabama, Mississippi, Louisiana, and Arkansas
West --- -------	Washington, Oregon, California, Nevada, New Mexico, Arizona, Texas, Oklahoma, Kansas, Nebraska, North Dakota, South Dakota, Idaho, Utah, Colorado, Montana, Wyoming, Alaska, and Hawaii

Urban and rural areas.—The definition of urban and rural areas was the same as that used in the 1960 Census. According to this definition, the urban population was comprised of all persons living in (a) places of 2,500 inhabitants or more incorporated as cities, boroughs, villages, and towns (except towns in New England, New York, and Wisconsin); (b) the densely settled urban fringe, whether incorporated or unincorporated, of urbanized areas; (c) towns in New England and townships in New Jersey and Pennsylvania which contained no incorporated municipalities as subdivisions and had either 2,500 inhabitants or more, or a population of 2,500 to 25,000 and a density of 1,500 persons or more per square mile; (d) counties in States other than the New England States, New Jersey, and Pennsylvania that had no incorporated municipalities within their boundaries and had a density of 1,500 persons or more per square mile; and (e) unincorporated places of 2,500 inhabitants or more not included in any urban fringe. The remaining population was classified as rural.

Urban areas are further classified by population size for places within urbanized areas and other urban places outside urbanized areas.

Grade in school.—The grade that the child attended at the time of interview was used and later verified against school records. The grade of children on summer vacation was considered to be the grade that they would enter when school resumed.

Education of parent.—The highest grade completed in school was recorded. The only grades counted were those attended in a regular public or private school where persons were given formal education, whether during the day or at night, and whether attendance was full or part time. A "regular" school is one which advances a person toward an elementary or high school diploma, or a college, university, or professional school degree. Education in vocational, trade, or business schools outside the regular school system was not counted in determining the highest grade of school completed.

Family income.—The income recorded was the total income received during the past 12 months by the head of the household and all other household members related to the head by blood, marriage, or adoption. This income was the gross cash income (excluding pay in kind) except in the case of a family with its own farm or business, in which case net income was recorded.

Parent.—A parent was the natural parent or, in the case of adoption, the legal parent of the child.

Guardian.—A guardian was responsible for the care and supervision of the child. He (or she) did not have to be the legal guardian to be considered the guardian for this survey. A guardianship could only exist when the parent(s) of the child did not reside within the sample household.

Head of household.—Only one person in each household was designated as the "head." He (or she) was the person who was regarded as the "head" by the members of the household. In most cases the head was the chief breadwinner of the family although this was not always true. In some cases the head was the parent of the chief earner or the only adult member of the household.

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